

ATTACHMENT H: WETLAND DELINEATION REPORT

1.0 WETLAND DELINEATION REPORT

This report has been prepared to fulfill the application requirements of the NRPA and Section 404 of the Federal Clean Water Act. Boyle Associates (“Boyle”) and Power Engineers were retained to identify and delineate wetlands (1) within all NECEC-associated transmission line corridors, and (2) in the vicinity of the planned NECEC converter station and substation. The purpose of the wetland field survey was to delineate and obtain detailed, accurate information on all onsite wetlands regulated by the United States Army Corps of Engineers (“USACE”) under Section 404 of the Clean Water Act, and by the MDEP under the NRPA, 38 M.R.S. §§ 480-A et seq.

1.0 Methodology

1.1 Remote Data Analysis

Aerial photos from the State of Maine Geographic Information Systems (“GIS”) database were overlaid with the proposed transmission line corridors, and section lines; these maps served as a basis of reference for the wetland delineations. Natural Resource Maps are included in Appendix A.

FEMA Flood Insurance Rate Maps region were reviewed to determine which wetlands are within 100-year flood zones. These zones were incorporated onto NECEC maps and are in Appendix A. Other resource maps utilized for the NECEC Project include MNAP rare plant communities or elemental plant occurrences, MDIFW, DWAs, T&E species habitat, IWWH, and Atlantic Salmon Commission (“ASC”)-designated critical nursery and spawning areas. NWI Maps were also reviewed.

1.2 Field Surveys

NECEC components were surveyed on foot by professional wetland scientists to identify and map all wetlands, surface water bodies, and vernal pools. Wetland delineations were completed pursuant to the 1987 USACE Wetland Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (2011). Natural Resource Maps are included in Attachment A.

The wetland field survey effort was performed by field crews generally consisting of one wetland scientist and one Global Positioning System operator. Following analysis of soils, hydrology, and vegetation at each sampling location, the wetland boundary was identified and flagged using glo-pink colored wetland delineation flagging tape. Wetland boundaries were recorded using portable Trimble Geo7X units. All relevant features were mapped by recording a minimum of 15 epochs per position with

a Precisional Dilution of Position no greater than 6.0. Centerlines of streams less than 10 feet in width were flagged using overhanging vegetation and top of each bank of streams greater than 10 feet in width were flagged. Stream flag locations were recorded using the same parameters as for the wetland flags. In total, approximately 192 linear miles of NECEC transmission line corridor were surveyed for the presence of federal and state jurisdictional waterbodies: wetlands, streams, and vernal pools.

The proposed Merrill Road Converter Station (Lewiston), Fickett Road Substation (Pownal), West Forks Termination Station and Moxie Gore Termination Station sites were also surveyed for the presence of waterbodies: wetlands, streams, and vernal pools. Tables detailing these resources can be found in Attachment B.

Boyle wetland scientists collected wetland-specific data and photographs at each wetland not previously surveyed. For those wetlands surveyed during previous field efforts, an average of five wetlands per linear mile were spot checked for accuracy in accordance with a verification protocol approved by MDEP and the USACE (Exhibit A). The wetland boundary line, vegetation, soils, and hydrology were checked and confirmed. In areas where any of the wetland parameters were found to be different, new data were collected to accurately reflect current wetland conditions. A Boyle Associates NECEC wetland summary form was completed for each wetland not previously surveyed. For those wetlands surveyed during previous field efforts, the corresponding data sheets were printed out, taken to the field and annotated/updated. Data documented on each form included wetland identification number, dominant vegetation, soil profile description, hydrologic indicators, stream characteristics and locations, wildlife observations, flagging sequence, and additional notes. In addition, one pair of USACE Routine Wetland Delineation plots was completed for approximately each linear mile of transmission line corridor surveyed. In areas where USACE data plots had previously been completed, wetland scientists checked and confirmed the accuracy of plot data.

All wetlands were classified in the field using the United States Fish and Wildlife Service's (USFWS) classification system (Cowardin et al. 1979). Field work was conducted during the 2015, 2016, 2017 and 2018 growing seasons. Exhibits B, C and D of this Attachment provide examples of USACE data plot forms and wetland summary forms.

For the purposes of resource identification naming, the NECEC Project corridor was segmented into mile sections, starting at the Québec border in Beattie Township, Maine at mile zero, increasing from Beattie east and south to Pownal, Maine. Mile numbers resume in Whitefield, Maine, and increase south to

Wiscasset, Maine. Each wetland was numbered according to the Project mile. For example, Wet-6-1 was the first wetland within project mile 6. Additional wetlands located within the same mile were numbered in sequential order. For example, additional wetlands located within mile 6 were named Wet-6-2, Wet-6-3, Wet-6-4, etc. Stream names were assigned in the same way, however in instances where waterbody features are not contiguous, each defined channel was given a separate ID number. For example, Stream 6-1 was the first stream within mile 6 and Stream 6-2 may be a separate channel associated with 6-1.

Specific methods for characterizing and evaluating vegetation, soils, and hydrology within wetland communities were as follows:

Vegetation: Dominant plant species in each major vegetative stratum (tree, sapling/shrub, and herbaceous) within the study area were identified and listed. Nomenclature for plants follows Haines and Vining (1998). Common names only are included in the discussion portion of this Attachment; for a list of wetland vegetation common names and binomial names please refer to Table 8 and Table 9 at the end of this Attachment. Each plant's wetland indicator status (e.g., OBL, FACW, FAC, FACU, and UPL) was assigned using the USFWS National List of Plant Species that Occur in Wetlands, Northeast Region 1 (Reed 1988) to determine if there was a prevalence of hydrophytic vegetation at the site.

Soils: A Dutch auger was used to extract samples to examine the soil for evidence of hydric indicators. Soils were characterized by determining texture, structure and color, generally to a depth of 20 inches below the top of the mineral soil surface. Soil matrix colors were identified by using a Munsell Soil Color Chart; hydric indicators such as depleted matrices, redoximorphic features, gleying, organic matter accumulation, and oxidized rhizospheres were also noted. In addition, hydric soil criteria were assigned in accordance with the manual of Field Indicators for Identifying Hydric Soils in New England (Field Indicators Manual), Version 3 (New England Hydric Soils Technical Committee 2004).

Representative wetland soils were noted as either mineral or organic. According to Brady and Weil (1999) histosols (organic soils without permafrost) have organic soil materials in more than half of the upper 80 centimeters of soil, or in two-thirds of the soil overlying shallow rock.

Therefore, for the purposes of this report, soils with greater than 16 inches of organic material or that have organic material in more than two-thirds of the soil profile over shallow bedrock were noted as organic soils. All other soils were noted as mineral.

Hydrology: Sampling locations were examined for evidence of wetland hydrology. General indicators of hydrology included the presence of watermarks, drift lines, sediment deposits, standing water, soil saturation within 12 inches of the soil surface, surface scouring, silt deposition, buttressed trunks, elevated roots, and drainage patterns within the wetland.

1.3 Wetlands of Special Significance Determinations

Wetlands within NECEC segments and substations were classified as either wetlands that are not of special significance or as Wetlands of Special Significance (WOSS), as defined in DEP Reg. chapter 310.4. Wetlands may be designated as WOSS for numerous reasons. All coastal wetlands and great ponds are WOSS. In addition, certain freshwater wetlands are WOSS. A freshwater WOSS has one or more of the following characteristics:

- The wetland contains a natural community that is critically imperiled (S1) or imperiled (S2) as defined by the MNAP;
- The wetland contains significant wildlife habitat as defined by 38 M.R.S. § 480-B (10);
- The wetland area is located within 250 feet of a coastal wetland;
- The wetland area is located within 250 feet of the normal high water line, and within the same watershed, of any lake or pond classified as a great pond under 38 M.R.S. § 465-A;
- The wetland contains under normal circumstances at least 20,000 square feet of aquatic vegetation, emergent marsh vegetation or open water (unless the 20,000 or more square foot area is the result of an artificial pond or impoundment);
- The wetland is inundated with floodwater during a 100-year flood event based on flood insurance maps produced by the FEMA or other site-specific information;
- The wetland contains peatland; and/or
- The wetland area is located within 25 feet of a river, stream, or brook.

Significant wildlife habitat, as defined by the NRPA, 38 M.R.S. § 480-B(10), includes, to the extent they have been mapped by MDIFW are within any other protected natural resource:

- habitats for state and federal agency listed rare, threatened and endangered species (“RTE”);
- High or moderate value deer wintering area (DWA) and travel corridors, as defined by MDIF&W;
- Seabird nesting islands, as defined by MDIF&W; and
- Critical spawning and nursery areas for Atlantic salmon, as defined by DMR.

Significant wildlife habitat also includes the following areas that are defined by MDIF&W and are in conformance with criteria adopted by DEP or are within any other protected natural resource:

- Significant vernal pool habitat;
- High and moderate value IWWH, including nesting and feeding areas; and
- Shorebird nesting, feeding, and staging areas.

Significant wildlife habitats reviewed to determine freshwater WOSS include: mapped habitats for state and federally listed T&E species; high and moderate value IWWH; presence of significant vernal pool habitat; and critical spawning and nursery areas for Atlantic salmon, as identified by the ASC.

1.4 Delineation Results – Transmission Line Corridors

A summary of all wetlands identified along Segments 1, 2, 3, 4, and 5, as well as Merrill Road Converter Station and the Fickett Road Substation sites is provided in table format (Attachment B-1 of this Application- Wetland Summary Table) and is organized by segment and wetland identification number. A project overview map depicting Project segments is provided as Figure 2-1 of Section 2.0 of this Application. Representative photos are provided in Exhibit E.

The following subsections provide general descriptions of non-WOSS wetlands, and detailed descriptions of representative WOSS wetlands identified along each segment.

1.4.1 Segment 1

Segment 1 extends from the border of Québec, Canada in Beattie Township, Maine to The Forks Plantation, Maine. This segment is approximately 53.5 miles in length and includes previously undeveloped land, historically and currently used for forest management. Segment 1 is located within a 150-foot wide cleared right-of-way in a previously undeveloped, 300-foot-wide transmission line corridor. Townships, towns, and cities traversed by Segment 1 include Beattie Township, Merrill Strip Township, Lowelltown Township, Skinner Township, Appleton Township, T5 R6 BKP WKR, T5 R7 BKP WKR, Hobbstown Township, Bradstreet Township, Parlin Pond Township, Johnson Mountain Township, West Forks Plantation, Moxie Gore, and The Forks Plantation. Segment 1 is located within the Upper Kennebec River Watershed, and Dead River Watershed Hydrologic Unit Code 8 (HUC8) and within the Central Maine Embayment Biophysical Region.

Four hundred and eighty-nine wetlands were identified, delineated, and mapped within the Segment 1 transmission line corridor (see Attachment A). One hundred seventeen wetlands are Palustrine Emergent (PEM) wetlands, sixty seven wetlands are Palustrine Scrub-Shrub (PSS) wetlands, and two hundred and seventeen wetlands are Palustrine Forested (PFO) wetlands. In addition, there are thirty-three PEM/PFO

wetlands, eighteen PFO/PSS wetlands, nineteen PSS/PEM/PSS wetlands, two PFO/PSS/PEM wetlands, one PFO/PSS/PUB wetland, and one Palustrine Unconsolidated Bottom PSS/(PUB) wetlands, and one Palustrine Open Water (POW) (Table 1). These wetlands receive sustaining hydrology from a high groundwater table, seepage, surface runoff from adjacent uplands, or inputs from adjacent waterbodies. Functions and values provided by wetlands within Segment 1 include groundwater recharge/discharge, nutrient removal, sediment/shoreline stabilization, and sediment retention with many of the wetlands providing wildlife habitat.

Table 1: Summary of Wetland Classes and Wetlands of Special Significance- Segment 1

	Non-WOSS	WOSS	Total
PEM	85	32	117
PSS	45	22	67
PFO	130	87	217
POW	0	1	1
PUB	2	0	2
PEM/PFO	25	7	32
PFO/PSS	9	9	18
PFO/PSS/PEM	1	1	2
POW/PSS/PFO	0	1	1
PFO/PSS/PUB	0	1	1
PSS/PUB	1	0	1
PEM/PSS	11	8	19
Unknown	8	3	11
Subtotal	308	172	489

The following are representative descriptions of the wetland types that were identified and delineated within the Segment 1 transmission line corridor.

1.4.1.1 Representative Wetland Descriptions: Non-WOSS

PEM (Palustrine Emergent Wetlands)

Eighty-five PEM wetlands of similar composition and characteristics (e.g., wet meadows and cat-tail marshes) that do not meet the definition of WOSS were identified along Segment 1 (Table 1). These PEM wetlands are characterized by persistent vegetation dominated by graminoids and herbaceous vegetation, although scattered shrubs are present in many of these PEM wetlands. The major distinction between the PEM wetlands in Segment 1 is hydrology. The wet, seasonally flooded or saturated wetlands include sphagnum and cat-tail swamps, extended floodplains and ephemeral ponds. The less wet, seasonally saturated wetlands are generally made up of wet meadows and sedge swamps. Common graminoid

species include fringed sedge, lamp rush, melic manna grass, fowl manna grass, dark green bulrush, cottongrass bulrush, northern green rush and reed canary grass. Common herbs include spotted touch-me-not, sensitive fern, northern lady fern, equisetum species, and goldenrod species. Scattered shrubs and saplings observed in some of the PEM wetlands include steeple-bush, meadowsweet, speckled alder, balsam fir, red maple, and yellow birch.

PSS (Palustrine Scrub-Shrub Wetlands)

Forty-five PSS wetlands that do not meet the definition of WOSS were identified during field surveys along Segment 1 (Table 1). These PSS wetlands are typically dominated by dense stands of speckled alder and areas of sapling sized tree species common to the region. Other shrubs and saplings that are present in many PSS wetlands in Segment 1 include meadowsweet, catberry, silky dogwood, and willow species. Yellow birch, red maple, red spruce, balsam poplar and balsam fir saplings are also present. Shade tolerant species such as sensitive fern and northern lady fern are often present in the herb stratum. Many of the PSS wetlands on Segment 1 are formerly forested wetlands that have been altered by recent timber harvest activities.

PFO (Palustrine Forested Wetlands)

One hundred and thirty PFO wetlands that do not meet the definition of WOSS were identified along Segment 1 (Table 1). Forested wetlands within Segment 1 are typically dominated by northern white-cedar, balsam fir, red maple, and black ash. Common subordinate species are gray birch, yellow birch, quaking aspen, green ash, and saplings of the canopy species. Shrubs such as winterberry, pussy willow and speckled alder are also present where the canopy opens. Cinnamon fern, sensitive fern, spotted touch-me-not, fringed sedge, dwarf red raspberry, and sphagnum moss are common in the herbaceous stratum.

PFO/PSS (Palustrine Forested/Scrub-Shrub Wetland)

Nine PFO/PSS wetlands which do not meet the definition of WOSS were identified during field surveys along Segment 1 (Table 1). Dominant species within the forested wetland portions are consistent with those described in the PFO description above. Shrub and sapling species include red maple, balsam fir, black spruce, speckled alder, meadowsweet, steeplebush and black elder.

PEM/PFO (Palustrine Emergent/Forested Wetland)

Twenty-five PEM/PFO wetlands which do not meet the definition of WOSS were identified during field surveys along Segment 1 (Table 1). The emergent component is typical of what is described in the above PEM representative descriptions and includes sensitive fern, jewelweed, fringed sedge, rattlesnake manna grass, cinnamon fern, dark green bulrush, twin flower, bristly dewberry and mountain wood sorrel. The

PFO component is typical of a forested wetland dominated by mature mixed growth forest and includes balsam fir, red maple, gray birch and black ash.

PUB (Unconsolidated Bottom Wetland)

Two PUB wetlands which do not meet the definition of WOSS were identified during field surveys of Segment 1 (Table 1). A PUB is a freshwater wetland with an open water component and an unconsolidated bottom soil structure. The vegetation includes winterberry and viburnum species. The understory, herbaceous species include bristly dewberry and blueflag iris. The class unconsolidated bottom includes all wetland and deepwater habitats with at least 25% cover of particles smaller than stones, and a vegetative cover less than 30%.

Soils and Hydrology in PEM, PSS, PFO, and Mixed Communities

Soil profiles within the wetlands identified along Segment 1 vary according to parent material and saturation level. Wetland soil characteristics range from thick organic soils to seasonally saturated mineral soils having a shallow O horizon. In those wetlands where organic soils are present, the O horizon tends to be relatively shallow with rock refusal ranging from 2 to 10 inches. The mineral soils are generally characterized by an organic surface horizon and/or a dark A horizon with matrix values less than or equal to 3 and chromas of 2 or less. Subsoils are commonly characterized by a depleted B horizon with matrix values of 4 or more and a chroma of 2 or less with redoximorphic features. Silt loam-textured soils are common. Occasional organic soils are present, generally with sapric horizons extending at least 16 inches below the top of the soil surface or to rock refusal anywhere between 2 to 20 inches. Most soils meet criteria A1, S7, F3 and A11 of the Field Indicators of Hydric Soils of the United States Manual, Version 8.0. Soils were generally saturated at the time of investigation and several had surface water present. Wetland hydroperiods are typically seasonally saturated, although seasonally flooded areas are also present on Segment 1. Indicators of hydrology along Segment 1 include water-stained leaves, drainage patterns, drift deposits, thin muck surface, oxidized rhizospheres and sulfidic odor.

1.4.1.2 Representative Wetland Descriptions: WOSS

On Segment 1, one hundred and seventy-two wetlands were identified as WOSS as defined in the Wetlands and Waterbodies Protection Rules Chapter 310. Some wetlands (or portions thereof) within the Segment 1 transmission line corridor are WOSS because they contained at least 20,000 square feet of aquatic vegetation, emergent marsh vegetation or open water; are located within 25 feet of a river, stream, or brook; are located in the 100-year flood zone (see flood zone maps in Attachment A); are located within 250 feet of the normal high water line, and within the same watershed, of any lake or pond classified as a great pond; contain significant wildlife habitat; contain mapped RTE species habitat; and/or

contain moderate or high value IWWH. Thirty-two of the WOSS are PEM wetlands, Twenty-two are PSS wetlands, eighty-five are PFO wetlands, one is a POW wetland, seven are PEM/PFO, nine are PFO/PSS wetlands, eight are PEM/PSS wetlands, and there are one each of PFO/PSS/PEM, POW/PSS/PFO, and PFO/PSS/PUB mixed community wetland types (Table 1).

The following narratives provide specific information on vegetation, soils, and hydrology for three representative wetlands identified along Segment 1 that meet WOSS designation criteria.

Wetland 24-10

Wetland 24-10 is primarily a PSS wetland but has PEM wetland components as well. The wetland is located along Bitter Brook in Bradstreet Township, Maine. The wetland area within 25 feet of Bitter Brook is WOSS. Bitter Brook is a tributary to Moose River. Additionally, Wetland 24-10 contains IWWH considered significant wildlife habitat, therefore; the wetland is WOSS.

In emergent components of the wetland, mostly along the fringes of the brook, dominant herbaceous species include tussock sedge, sensitive fern, Canada bluejoint, and various sedge species. Dominant species in the scrub-shrub components include speckled alder, winterberry, meadowsweet, and steep-le-bush.

Evidence of hydrology in Wetland 24-10 includes saturated soils and evidence of seasonal flooding due to occasional brook overflow, including drainage patterns, and surface scouring. Soils in the wetland have a silt loam texture and display a dark A horizon underlain by a B horizon with a depleted matrix and redox concentrations. These soils meet indicator F6 of the Field Indicators Manual.

Wetland 33-07

Wetland 33-07 is primarily a PEM wetland, which also contains an area of PFO wetland habitat. The wetland is located in Johnson Mountain Township, Maine. According to the MNAP, this wetland is within a mapped known occurrence of the Bicknell's Thrush (*Catharus bicknelli*). The wetland area contains RTE habitat, therefore the wetland is a WOSS.

In emergent components of the wetland, dominant species include woolgrass, soft rush, and various sedge species. Dominant species in the scrub-shrub components are meadowsweet species. Within the PFO area, the wetland vegetation is dominated by a mix of trees and shrubs, most notably black spruce. Evidence of hydrology in the wetland includes seasonally flooded areas, as well as saturated soils and

drainage patterns. Soils in the wetland have a sandy loam texture and display a depleted A horizon. These soils meet indicator S4 of the Field Indicators Manual.

Wetland 48-08

Wetland 48-08 is primarily a PSS wetland. The wetland is located in the town of West Forks Plantation, Maine and appears to have been partially logged within the last 50 years. The wetland is considered a WOSS because it contains peatlands. Dominant vegetative species include rhodora, rose-myrtle, winterberry, and mountain holly. Within small openings, herbaceous species are sparse and include cinnamon fern and sphagnum. A low percentage of tree cover was observed in portions of the wetland. Tree cover includes stunted black spruce and white pine. While a defined vernal pool depression is absent, scattered spotted salamander egg masses were identified throughout the wetland. Wetland 48-08 has saturated soils, a high water table, and evidence of shallow flooding including thin muck surface, water-stained leaves and watermarks. Soils in the wetland are organic (hemic) and have rock refusal at 10 inches. Wetland 48-08 meets indicator A1 of the Field Indicators Manual. During their initial site visit, in addition to spotted salamander egg masses, wetland scientists observed moose droppings throughout the wetland.

1.4.2 Segment 2

Segment 2 extends from The Forks, Maine to the Wyman hydropower station in Moscow, Maine, from project mile 53.6 to 75.5, for a total of 21.9 miles. This segment will be located within an existing partially developed 300-foot-wide transmission line corridor, CMP Section 222. Clearing width in most locations is approximately 75-feet, however may vary depending on conditions. Towns associated with Segment 2 include The Forks Plantation, Bald Mountain Township T2 R3, Caratunk, and Moscow. Segment 2 is located within the Upper Kennebec and Lower Kennebec River Watersheds (HUC 8) and within the Central Maine Embayment Biophysical Region.

One hundred forty-seven wetlands were identified, delineated, and mapped within Segment 2 (see Attachment A). Fifty wetlands are PEM wetlands, twelve are PSS wetlands, twenty-five are PFO wetlands, two are POW/PFO wetlands, ten are PSS/PEM wetlands, seven are PFO/PSS wetlands, three are PFO/PSS/PEM wetlands, and thirty-four are PEM/PFO wetlands (Table 2).

These wetlands receive sustaining hydrology from a high groundwater table, seepage, surface runoff from adjacent uplands, or inputs from adjacent waterbodies. Functions and values provided by wetlands within Segment 2 include groundwater recharge/discharge, sediment/shoreline stabilization, floodflow alteration, wildlife habitat, and sediment retention.

Table 2: Summary of Wetland Classes of Wetlands of Special Significance- Segment 2

	Non-WOSS	WOSS	Total
PEM	30	20	50
PSS	7	5	12
PFO	19	6	25
PEM/PFO	23	11	34
PEM/PSS	6	4	10
PFO/PSS/PEM	1	2	3
PFO/PSS	4	3	7
POW/PFO	2	0	2
Unknown	1	3	4
Subtotal	93	54	147

The following are representative descriptions of the categories of wetlands that were encountered and mapped within the Segment 2 transmission line corridor.

1.4.2.1 Representative Wetland Descriptions: Non-WOSS

PEM (Palustrine Emergent Wetlands)

Thirty PEM wetlands of similar composition and characteristics (*e.g.*, wet meadows) that do not meet the definition of WOSS were identified along Segment 2 (Table 2). These wetlands are characterized by persistent vegetation dominated by graminoids and herbs, although scattered shrubs are sometimes present. Vegetation in these wet meadow communities is relatively consistent from one area to another. Many of the PEM wetlands on Segment 2 are formerly forested wetlands that have been maintained as transmission line corridor for many years. Species with a graminoid growth habit that are common include wool-grass, nodding sedge, rattlesnake mannagrass, fowl mannagrass. Common herbs include sensitive fern, cinnamon fern, wrinkle leaved goldenrod, spotted touch-me-not. Scattered shrubs and saplings are present in some of the PEM wetlands. These include balsam fir, red spruce, speckled alder, and red maple.

PSS (Palustrine Scrub-Shrub Wetlands)

Seven PSS wetlands that do not meet the definition of WOSS were identified during field surveys along Segment 2 (Table 2). These scrub-shrub wetlands are typically dominated by dense stands of speckled alder and meadowsweet species. Additional shrubs and saplings found throughout the wetland included maple, pussy willow, and balsam fir. Sensitive fern, cinnamon fern, soft rush, and spotted touch-me-not are often present in the herb stratum. Many of the PSS wetlands on Segment 2 are formerly forested wetlands that have been maintained as transmission line corridor for many years.

PFO (Palustrine Forested Wetlands)

Nineteen PFO wetlands that do not meet the definition of WOSS were identified along Segment 2 during field surveys (Table 2). These wetlands are typically dominated by black ash, red maple, and balsam fir. Common subordinate species are yellow birch, white cedar, and saplings of the canopy species. Shrubs such as speckled alder are commonly present where the canopy opens. Sensitive fern, cinnamon fern, nodding sedge, and reed canary grass are common herbs. PFO wetlands are present at the edges of the transmission line corridor, in areas that are not maintained.

POW/PFO (Palustrine Open Water/Forested Wetlands)

Two POW/PFO wetlands, Wetland 55-02 and 55-03, which do not meet the definition of WOSS, were identified during field surveys along Segment 2 (Table 2). These wetlands are dominated by an approximately even mix of open water and forested cover. The forested component is generally typical of what is described in the above PFO wetland description while the open water component of this wetland is semi-permanently flooded.

Soils and Hydrology in PEM, PSS, PFO, and Mixed Communities

Soil profiles within the wetlands identified along Segment 2 are generally characterized by an organic surface horizon and/or a dark A horizon with matrix values less than or equal to 3 and chromas of 2 or less. Subsoils are commonly characterized by a depleted layer with matrix values of 4 or more and a chroma of 2 or less with redoximorphic features. Silty loam textured soils are common. Occasional organic soils are present, generally with sapric horizons at least 16 inches deep. Most soils meet criteria F6, F3, and A1 of the Field Indicators of Hydric Soils of the United States Manual, Version 8.0. Soils were generally saturated at the time of investigation and free water was often observed in the pit within 12 inches of the soil surface. Wetland hydroperiods are typically seasonally saturated, although seasonally flooded areas are also present.

1.4.2.2 Representative Wetland Descriptions: WOSS

On Segment 2, fifty-four wetlands were identified as WOSS. Some wetlands (or portions thereof) within the Segment 2 transmission line corridor are WOSS because they are associated with a river, stream, or brook; are located in the 100-year flood zone (see flood zone maps in Attachment A); contain Significant Vernal Pools (“SVPs”) or a Potentially Significant Vernal Pool (“PSVP”); contain greater than 20,000 square feet of emergent marsh vegetation and/or open water; contain peatland; and/or contain moderate or high value IWWH. Twenty of the WOSS are PEM wetlands, five are PSS wetlands, and six are PFO wetlands (Table 2). The remaining 23 WOSS are mixed community type wetlands.

The following narratives provide specific information on vegetation, soils, and hydrology for six representative wetlands identified along Segment 2 that meet the criteria for designation as WOSS.

Wetland 54-01

Wetland 54-01 is a predominantly PFO wetland with a small PSS component located within CMP’s existing transmission line corridor in The Forks Plantation. The wetland is classified as WOSS because it is located within 250 feet of Moxie Lake. Wetland areas within 250 feet of the normal high water line, and within the same watershed, of any lake or pond classified as great pond are WOSS. Wetland 54-01 also contains a perennial stream P-STR-54-1 and an intermittent stream I-STR-54-02.

Dominant trees in the canopy include northern white cedar, black ash, yellow birch, red maple and balsam fir. Dominant shrubs include speckled alder, meadowsweet, red maple, northern white cedar, and silky dogwood. Common herbs species include swamp sensitive fern, reed canary grass, fringed sedge, interrupted fern, equisetum and goldenrod species. This wetland is seasonally saturated to seasonally flooded. Other indicators of wetland hydrology include sediment deposits and water stained leaves. The silt loam textured soils have a dark Ap horizon underlain by a depleted Bg horizon at 2 inches, and meet indicator A11 of the Field Indicators Manual.

Wetland 56-01

Wetland 56-01 is a PEM/PFO wetland located within the cleared corridor of CMP’s existing transmission line in The Forks Plantation, Maine. Wetland 56-01 is contiguous with greater than 20,000 square feet of PEM, and is within 250 feet of Moxie Pond, a great pond. Wetland 56-01 and is therefore a WOSS.

Dominant herbaceous species include reed canary grass, fringed sedge, sensitive fern, goldenrod species and aster species. Hydrology indicators include surface water, high water table, saturation, and water stained leaves. Soils are characterized by a thin dark A horizon, rock refusal at 4 inches. Soils key to indicator TF12 of the Field Indicators Manual.

Wetland 64-03

Wetland 64-03 is a PFO wetland located partially within the cleared corridor of CMP's existing transmission line and extending east off the survey area in Bald Mountain Township. While the on-site portion of the wetland is characterized by coniferous forested wetlands, a majority of the wetland off site is visible from the survey area and is characterized by a broad expanse of natural emergent marsh, identified as IWWH. Because wetland 64-3 contains significant wildlife habitat and PEM wetland greater than 20,000 square feet the wetland is WOSS. Additionally, wetland 64-03 contains two river, stream, or brooks.

The forested portion of wetland 64-03 is dominated by northern white-cedar and balsam fir. Sapling and shrub species within this portion of the wetland are dominated by speckled alder and meadowsweet. Areas dominated by herbaceous cover include three-seed sedge, northern green rush, reed canary grass, rattlesnake manna grass and broad expanses of sphagnum moss. Hydrology indicators include high water table, saturation, and algal crust. Soils are characterized by a thick organic O horizon, with rock refusal at 14 inches. Soils key to indicator A1 of the Field Indicators Manual. During field investigations, wetland scientists noted moose and bear sign.

Wetland 64-06

Wetland 64-06 is a PSS wetland located within and adjacent to CMP's existing transmission line corridor in Bald Mountain Township T2 R3. This wetland is associated with an unnamed perennial stream. The stream is approximately four feet wide and substrates consist of peat and muck. Wetland areas within 25 feet of the stream are WOSS.

Dominant shrubs include speckled alder, meadowsweet, and black spruce. Emergent species include barber-pole sedge, lamp rush and three-seed sedge. Hydrogen sulfide odor, water stained leaves, surface water and saturation are indicators of wetland hydrology. The mineral soils have a loamy texture in sub-horizons, with eight inches of sapric organic material. The A horizon is dark gray with rock refusal at 14 inches. These soils meet criteria A2 of the Field Indicators Manual.

Wetland 64-10

Wetland 64-10 is a large PFO/PEM wetland that extends well beyond the boundary of the existing, developed CMP transmission line corridor. The wetland straddles the boundary of Bald Mountain Township and Caratunk. The wetland contains a peatland, and thus, the wetland is classified as a WOSS.

Within the survey area, leatherleaf, black spruce saplings and meadowsweet are common shrubs. The herbaceous stratum includes broad-leaf cattail, rattlesnake mannagrass and lamp rush. Evidence of wetland hydrology in this seasonally flooded wetland includes surface water, saturation and sulfidic odor. A 30 inch-thick organic, sapric horizon is present and meets criterion A1 of the Field Indicators Manual.

Wetland 74-102

Wetland 74-102 is a PEM/PSS wetland located within the cleared corridor of CMP's existing transmission line in Moscow. The wetland is a natural depression that appears to have been modified by timber harvest equipment and transmission line construction equipment in years past. Wetland 74-102 contains high and moderate value deer wintering area (DWA), as defined and mapped by MDIF&W and is therefore considered a WOSS. Dominant vegetation within the herbaceous layer includes sensitive fern, cinnamon fern, reed canary grass and speckled alder seedlings. A small PSS component exists and is dominated by speckled alder. Hydrology indicators include surface water, saturation, and an algal mat. Soils are characterized by a thin dark A horizon with rock refusal at 8 inches. Soils key to indicator TF12 of the Field Indicators Manual.

1.4.3 Segment 3

Segment 3, approximately 71.1 miles in length, extends from the Wyman hydropower station in Moscow to the proposed Merrill Road Converter Station in Lewiston. Segment 3 will be located within an existing, partially developed 400-foot wide transmission line corridor, where clearing widths are 75 feet in most locations. Towns associated with NECEC Segment 3 include Moscow, Concord, Embden, Anson, Starks, Industry, New Sharon, Farmington, Wilton, Chesterville, Jay, Livermore Falls, Leeds, Greene, and Lewiston. Segment 3 is located within the Lower Kennebec River and Lower Androscoggin River Watersheds (HUC 8) and within the Central Maine Embayment Biophysical Region.

Four hundred ninety wetlands were identified, delineated, and mapped within the Segment 3 transmission line corridor (see Attachment A for Natural Resources Maps). Forty-one wetlands are PEM wetlands, fifty-seven are PSS wetlands, one hundred and eight are PFO wetlands, eighty-five are

PSS/PFO wetlands, fifty-eight are PEM/PFO wetlands, seventy-six are PEM/PSS wetlands, one is a PFO/PSS/POW wetland, one is a PFO/PEM/POW wetland, one is a PUB wetland, one is a PUB/PFO wetland, and one is a PUB/PSS wetland (Table 3).

These wetlands receive sustaining hydrology from a high groundwater table, seepage, surface runoff from adjacent uplands, or inputs from adjacent waterbodies. Functions and values provided by wetlands within Segment 3 include groundwater recharge/discharge, sediment/shoreline stabilization, floodflow alteration, nutrient removal, and sediment retention, with many of the wetlands providing wildlife habitat.

Table 3: Summary of Wetland Classes and Wetlands of Special Significance- Segment 3

	Non-WOSS	WOSS	Total
PEM	26	15	41
PSS	32	25	57
PFO	69	39	108
PEM/PSS	40	36	76
PSS/PFO	39	46	85
PFO/PEM	26	32	58
PUB	0	1	1
PUB/PFO	2	1	3
PUB/PSS	1	0	1
PEM/PFO/PSS	21	20	41
PFO/PEM/POW	0	1	1
PFO/PSS/POW	0	1	1
Unknown	7	10	17
Subtotal	263	227	490

The following are representative descriptions of the categories of wetlands that were encountered and mapped within the Segment 3 transmission line corridor.

1.4.3.1 Representative Wetland Descriptions: Non-WOSS

PEM (Palustrine Emergent Wetlands)

Twenty-six PEM wetlands of similar composition and characteristics (e.g., wet meadows and marshes) that do not meet the definition of WOSS were identified along Segment 3 (Table 3). The PEM wetlands are characterized by persistent vegetation dominated by graminoids and herbaceous vegetation, although scattered shrubs and saplings are present in some of the PEM wetlands in Segment 3. The three typical types of PEM wetland identified were portions of maintained fields, natural emergent marshes, and formerly forested wetlands that were cleared and are maintained as transmission line corridor. Common graminoid species include sallow sedge, cotton grass, wool-grass, and various sedge and rush species. Common herbs include broad-leaved cat-tail, sensitive fern, flat-topped white aster, New England aster, cinnamon fern, smooth goldenrod, Labrador tea, and swamp dewberry. Scattered shrubs and saplings

observed in some of the PEM wetlands include steeple-bush, meadowsweet, winterberry, speckled alder, willow species, balsam fir, and red maple.

PSS (Palustrine Scrub-Shrub Wetlands)

Thirty-two PSS wetlands that do not meet the definition of WOSS were identified during field surveys along Segment 3 (Table 3). These scrub-shrub wetlands are dominated by dense stands of speckled alder and winterberry mixed with steeple-bush, and meadowsweet. Other shrubs and saplings present include mountain holly, silky dogwood, wild-raisin, and willow species. Gray birch, yellow birch, red maple, black ash, and balsam fir saplings are also present. Shade tolerant species such as sensitive fern and cinnamon fern as well as various sedge species are often present in the herb stratum. Many of the PSS wetlands on Segment 3 are formerly forested wetlands that have been maintained as transmission line corridor for many years.

PFO (Palustrine Forested Wetlands)

Sixty-nine PFO wetlands that do not meet the definition of WOSS were identified along Segment 3 during field surveys (Table 3). These wetlands are typically dominated by balsam fir, red maple, gray birch, yellow birch, black ash, and green ash. Northern white cedar and eastern hemlock are also present. The understory is typically comprised of saplings of the canopy species. Shrubs such as winterberry and speckled alder are also present where the canopy opens. Royal fern, cinnamon fern, jewelweed, dewberry, and sensitive fern are common herbs. A sphagnum moss ground cover is also typical. Most of the forested wetlands located on Segment 3 are located adjacent to the existing cleared transmission line corridor, within the area proposed for expansion.

PSS/PFO (Palustrine Scrub-Shrub/Emergent Wetlands)

Thirty-nine PSS/PFO wetlands that do not meet the definition of WOSS were identified during field surveys along Segment 3 (Table 3). These were determined to be scrub-shrub/forested wetlands because they have a co-dominance of these two cover types. The scrub-shrub and forested components are typical of what is described in the PSS and PFO representative wetland descriptions. The survey corridor in this segment is partially forested; the maintained cleared transmission line corridor contains PSS wetland and small areas of PEM wetland, and the un-cleared area contains PFO wetland.

PEM/PSS (Palustrine Emergent/Scrub-Shrub Wetland)

Forty PEM/PSS wetlands which do not meet the definition of WOSS were identified during field surveys along Segment 3 (Table 3). The emergent and scrub-shrub components are typical of what is described in the above PEM and PSS representative wetland descriptions.

PUB/PSS (Palustrine Unconsolidated bottom/Scrub-Shrub Wetland)

Two PUB/PSS wetlands which do not meet the definition of WOSS were identified during field surveys along Segment 3 (Table 3). The Scrub-Shrub component is typical of what is described in the above PSS representative wetland descriptions. A PUB is a freshwater wetland with an open water component and an unconsolidated bottom soil structure. Wetlands in this category are characterized by both wetland components.

PFO/PUB (Palustrine Forested/Unconsolidated Bottom Wetland)

Two PFO/PUB wetlands which do not meet the definition of WOSS were identified during field surveys along Segment 3 (Table 3). The forested component is typical of what is described in the above PFO representative wetland descriptions. A PUB is a freshwater wetland with an open water component and an unconsolidated bottom soil structure. Wetlands in this category are characterized by both wetland components.

Soils and Hydrology in PEM, PSS, PFO, and Mixed Communities

Soil profiles within the wetlands identified along Segment 3 vary according to location in the region, topography, parent material, aspect, and saturation level. Wetland soil characteristics range from thick organic soils to seasonally saturated mineral soils. The mineral soil parent materials include fine-grained marine sediments, glacial till, and outwash. The mineral soils are generally characterized by an organic surface horizon and/or a dark A horizon with matrix values less than or equal to 3 and chromas of 2 or less. Subsoils are commonly characterized by a depleted Bg horizon with matrix values of 4 or more and a chroma of 2 or less with distinct or prominent redoximorphic features. Silt loam-textured soils are common. Organic soils are present, generally with sapric horizons extending at least 16 inches below the top of the soil surface. Most soils meet criteria F6, F3, and A1 of the Field Indicators of Hydric Soils of the United States Manual, Version 8.0. Soils were generally saturated at the time of investigation and free water was often observed in the pit within 12 inches of the soil surface. Wetland hydroperiods are typically seasonally saturated, although seasonally flooded areas are occasionally present on the segment. Other typically noted evidence of hydrology is drainage patterns, shallow roots, water-stained leaves, and surface scouring.

1.4.3.2 Representative Wetland Descriptions: WOSS

In Segment 3, two hundred twenty-seven wetlands were identified as WOSS. Some wetlands (or portions thereof) within the Segment 3 transmission line corridor are WOSS because they are associated with large (greater than 20,000 square feet) open water or emergent marsh vegetation wetlands; are associated with rivers, streams or brooks; are located in the 100-year flood zone (see flood zone maps in Attachment A); contain SVPs and potentially significant vernal pools (PSVPs); contain peatland; and/or contain moderate or high value WWH. Fifteen of the WOSS are PEM wetlands, twenty-five are PSS wetlands, thirty-nine are PFO wetlands, thirty-six are PEM/PSS wetland, thirty-two are PEM/PFO wetlands, forty-six are PSS/PFO wetlands, one is a PUB wetland and the remainder are mixed community type wetlands (**Table 3**).

The following narratives provide specific information on vegetation, soils, and hydrology for eleven representative wetlands identified along Segment 3 that meet the criteria for designation as WOSS.

Wetland 78-05

Wetland 78-05 is predominantly a PFO wetland with smaller PEM components restricted to the cleared portion of the CMP transmission line corridor. The wetland extends beyond the survey area to the west and is located in Concord Township, Maine. Wetland 78-05 is a cedar swamp and contains two small and shallow intermittent streams having a rocky streambed. Wetland 78-05 contains a natural community that is either critically imperiled (S1) or imperiled (S2) as defined by the MNAP, thus, the wetland is considered a WOSS. In addition, wetlands within 25 feet of the streams are WOSS.

The forested component of wetland 78-05 is dominated by northern white cedar and yellow birch. The understory is dominated by saplings of the same canopy species. The sparse herbaceous layer consists of dwarf red raspberry and false lily of the valley. Hydrology indicators include saturation, high water table, and water stained leaves. Soils are histosols, characterized by a thick dark O horizon and key to indicator A1 of the Field Indicators Manual.

Wetland 100-05

Wetland 100-05 is a PFO wetland located partially within the cleared corridor of CMP's existing transmission line and also extending east and west off the survey area in Starks, Maine. Wetland 100-05 is a long, narrow drainage and drains to the northwest. While it is mainly composed of PFO wetland, there are smaller components of PEM and PSS wetland. Wetland 100-5 contains significant wildlife

habitat. Areas within wetland 100-05 have been identified as IWWH. Because wetland 100-05 contains significant wildlife habitat the wetland is WOSS.

The forested portion of wetland 100-05 is dominated by gray birch and red maple. Sapling and shrub species within this portion of the wetland are also dominated by gray birch and red maple. Areas dominated by herbaceous cover include Canada bluejoint, sensitive fern, ostrich fern, New York fern, rough avens, and foam flower. Hydrology indicators include seasonal flooding, drainage patterns and surface scouring. Several springs and seeps that disappear into the wetland were noted by wetland scientists during investigations. Soils are characterized by a shallow dark A horizon underlain by a depleted matrix with redoximorphic concentrations. Soils are deep, sandy loam textures. Soils key to indicator F3 of the Field Indicators Manual.

Wetland 103-11

Wetland 103-11 is predominantly a PSS/PFO wetland with smaller PEM components. The wetland is located partially within the cleared corridor of CMP's existing transmission line and also extends beyond the survey area to the north and south. Wetland 103-11 has a long and narrow configuration and drains to the north. It is composed of several wetland drainages along the floodplain of the perennial Goodrich Stream and contains two other unnamed streams. All streams within wetland 103-11 have substrates consisting of cobble, gravel and sand. Goodrich Stream is approximately 15 feet wide, while the second perennial stream is about seven feet wide. Wetland 103-11 contains high and moderate value deer wintering area (DWA), as defined and mapped by MDIF&W and is therefore considered a WOSS. Additionally, wetlands located within 25 feet of a river, stream, or brook are WOSS.

A mix of broad-leaved and deciduous trees dominate the PFO wetland area and include yellow birch and balsam fir. The shrub and sapling layer consists of speckled alder and balsam fir. Dominant herbaceous species include sensitive fern, king of the meadow, spotted touch me not, Canada bluejoint, boneset, arrowleaf, tearthumb, and aster species. Hydrology indicators include saturation, drainage patterns and elevated roots. Soils are characterized by a thick dark A horizon underlain by a B horizon consisting of dark gray with redox concentrations. Soils key to indicator F3 of the Field Indicators Manual.

Wetland 116-05

Wetland 116-05 is a typical example of PFO/PEM/POW WOSS found along Segment 3. This is a mixed-wood, mature, forested wetland with the exception of the portion of the wetland that is maintained as cleared transmission line corridor. The wetland is located partially within the CMP

transmission line corridor and partially within forested areas adjacent to the transmission line corridor. Wetland 116-05 extends off the survey area to the east and west. Wetland 116-05 is a WOSS because it contains significant wildlife habitat. A straddle pool, PSVP-117-02 is within the uncleared portion of the wetland, adjacent to the western boundary. Wetland 116-5 also contains an unnamed perennial stream that drains to the north. The stream is about five feet wide, dominated by boulders, cobble and gravel. Three natural, non-significant vernal pools, VP-116-5, 116-06, and 117-01, were found within the cleared transmission line portion of the wetland.

Dominant herbaceous species include broad-leaf cattail, pointed broom sedge, shallow sedge, bluejoint, sensitive fern, and cinnamon fern. Noted shrub species include meadowsweet, steeplesbush, catberry and common winterberry. Off the cleared portion of the transmission line corridor, forested components of the wetland are dominated by red maple, yellow birch, black ash and green ash. Noted evidence of wetland hydrology includes permanent and seasonal flooding, saturated soils, silt deposition, water marks, buttressed roots, elevated roots and drainage patterns. Soils in this wetland generally consist of a shallow organic surface underlain by silt loam-textured soils with a depleted or gleyed matrix. A layer of coarse sand was observed between 5-9 inches. The majority of the wetland meets indicator A3 of the Field Indicators Manual.

Wetland 121-01

Wetland 121-01 is a typical example of PEM WOSS found along Segment 3. The portion of the wetland that is within the cleared transmission line corridor and beyond is dominated by emergent marsh wetland vegetation in Jay, Maine. The wetland is considered a WOSS because it contains an open water wetland greater than 20,000 square feet. This wetland is also traversed by an unnamed perennial tributary stream. Due to these criteria, the wetland within 25 feet of the stream is considered WOSS. During their site visits, wetland scientists observed deer, beaver and muskrat sign.

Dominant herbaceous species include reed canary grass, lamp rush, rattlesnake manna grass, broadleaf cattail, tussock sedge, pointed broom sedge, yellow-green sedge, royal fern, swamp candles, simpler's joy and green arrow-arum. Noted evidence of wetland hydrology includes saturated soils, permanent and seasonal flooding, drainage patterns and silt deposition. Soils in this wetland generally have a thin organic surface, which is underlain by a fine sandy loam with a depleted matrix. The majority of the wetland meets indicator A11 of the Field Indicators Manual.

Wetland 122-03

Wetland 122-03 is a typical example of PSS WOSS wetland found along Segment 3. This wetland is naturally dominated by scrub-shrub wetland vegetation due to the site hydrology. The wetland extends beyond the CMP transmission line corridor in Livermore Falls. Areas of this wetland that are within 25 feet of the stream are WOSS.

The wetland is considered a WOSS because of its association with Clay Brook and Redwater Brook, which are tributaries to the Androscoggin River. Wetlands within 25 feet of the streams are WOSS.

Dominant shrub species include speckled alder, buckthorn, southern arrow-wood and red osier dogwood. Emergent vegetation scattered throughout small, open pockets includes rattlesnake grass, sensitive fern, fringed sedge, shallow sedge, red-tinge bulrush, cinnamon fern, blue joint, and reed canary grass. Noted evidence of wetland hydrology includes seasonal flooding, drainage patterns, silt deposition, and surface scouring. Soils in this wetland have a thin organic surface, underlain by a silt loam with a depleted matrix. The majority of the wetland meets indicator F6 of the Field Indicators Manual.

Wetland 127-01

Wetland 127-01 is predominantly comprised of PFO wetland. The wetland is located beyond the cleared CMP transmission line corridor in Livermore Falls. This small, isolated wetland is located about 200 feet east of the Androscoggin River. The wetland contains habitat for a Special Concern (SC) freshwater mussel species, the creeper (*Strophitus undulatus*); therefore, the wetland is WOSS. In addition, wetland 127-1 is located within 25 feet of a stream. Wetlands within 25 feet of a river, stream or brook are WOSS.

Vegetation found within herbaceous stratum includes sensitive fern, lady fern and cinnamon fern. The forested canopy of wetland 127-01 is dominated by striped maple, balsam fir and red maple. Saplings found within the PFO component of the wetland red maple and balsam fir. The wetland is seasonally flooded and signs of hydrology include surface water (up to 1”), water stained leaves, and drainage patterns. Soils are comprised of a shallow dark A horizon, underlain by a depleted B horizon comprised of silt loam. These soils meet indicator F3 of the Field Indicators Manual.

Wetland 129-01

Wetland 129-01 is predominantly a PFO wetland with smaller PEM components restricted to the cleared CMP transmission line corridor. Wetland 120-01 is located partially within the cleared corridor

of CMP's existing transmission line and extends beyond the survey area to the west in Livermore Falls. Wetland 129-01 is characterized by pit and mound topography within the forested component. Wetland 129-01 contains ETS and is therefore a WOSS.

A mix of broad-leaved deciduous and coniferous trees including green ash, red maple, gray birch and American larch dominate the PFO wetland area. The shrub layer consists of common winterberry, meadowsweet, steeple bush, maleberry, red osier dogwood, sheep laurel and rhodora. Dominant herbaceous species include sensitive fern, cinnamon fern, royal fern, scouring rush, yellow-green sedge, Canada bluejoint, fringed sedge, arrowleaf, tearthumb, tawny cottongrass and expanses of thick sphagnum moss. Hydrology indicators include saturation, drainage patterns and water stained leaves. Soils are characterized by a shallow organic horizon and a thin dark A horizon, underlain by a depleted B horizon consisting of dark gray with redox concentrations. Soils are sandy and key to indicator S5 of the Field Indicators Manual.

Wetland 131-01

Wetland 131-01 is predominantly comprised of PSS wetland with smaller PEM components. The wetland is located both within and beyond the cleared CMP transmission line corridor in Leeds. The wetland drains towards the Dead River, a tributary to the Androscoggin River. Wetland 131-01 is within areas identified as a 100-year flood zone. Those wetland areas within the mapped 100-year floodplain are WOSS. In addition, wetland 131-01 contains a stream. Wetlands within 25 feet of the river are WOSS.

Vegetation found within emergent components of the wetland includes Kentucky bluegrass, jewelweed, sensitive fern, and cinnamon fern. The forested component of wetland 131-01 is dominated by green ash, American elm and red maple. Shrubs found within the PFO component of the wetland include silky dogwood and speckled alder. The wetland is seasonally flooded and signs of hydrology include surface scouring, elevated roots, drift lines, and drainage patterns. Soils are comprised of a shallow dark A horizon, underlain by a depleted B horizon comprised of silt loam. These soils meet indicator A11 of the Field Indicators Manual. Wetland scientists observed deer within the wetland.

Wetland 140-06

Wetland 140-06 is predominantly a PSS wetland with smaller PFO components on site. It is located partially within the cleared corridor of CMP's existing transmission line and also extends into a broad expanse of PEM wetland beyond the survey area to the east. Wetland 140-06 is located in Greene, Maine and contains three streams that drain through the wetland and ultimately to Allen Pond. Streams

within wetland 140-6 have substrates consisting of cobble, gravel and sand. A few wood frog and spotted salamander egg masses were observed in ATV ruts near mile marker 140.5. A majority of the wetland off site is visible from the survey area and is characterized by a broad expanse of natural emergent marsh identified as IWWH. Because wetland 140-06 contains significant wildlife habitat (IWWH) and PEM wetland greater than 20,000 square feet the wetland is WOSS. Wetland 140-06 is also within 250 feet of Allen Pond, a great pond. Great ponds and freshwater wetland areas located within 250 feet of a great pond are WOSS. Additionally, wetland 140-06 contains three streams. Wetlands within 25 feet of streams are also WOSS.

The forested component of wetland 140-06 is dominated by red maple, mountain maple, yellow birch, gray birch, balsam fir and American elm. The shrub and sapling layer consists of speckled alder, common winterberry, arrowwood, red maple, and balsam fir. Dominant herbaceous species include Canada bluejoint, dark-green bulrush, cinnamon fern, late goldenrod, shallow sedge, fringed sedge and cranberry. Hydrology indicators include saturation, drainage patterns, surface scouring and areas of up to 24 inches of inundation in the center of the wetland. Soils are characterized by a thick dark A horizon underlain by a B horizon consisting of dark gray with redox concentrations. Soils key to indicator F3 of the Field Indicators Manual. During field surveys, wetland scientists observed moose and deer sign.

Wetland 142-04

Wetland 142-04 is primarily a PEM wetland within the cleared portion of the CMP transmission line corridor. This wetland extends well beyond the survey area. Areas outside the cleared corridor are characterized by forested cover. This wetland is located in Greene, Maine. As depicted on USGS topographic maps and National Wetland Inventory Maps, wetland 142-04 is contiguous with Daggett Bog, which is about 1400 feet to the west of the CMP transmission line corridor. While wetland scientists did not identify peatland within the survey boundaries, they did note that the area may be WOSS due to connectivity to Daggett Bog. Because wetland 142-04 is contiguous with a peatland, all of this wetland is considered a WOSS.

In the PEM components of the wetland, dominant species include cottongrass bulrush, lake bank sedge, broad-leaf cattail, and Canada bluejoint. Dominant species off the cleared portion of the transmission line corridor, within the PFO cover type, includes red maple, speckled alder, American larch, yellow birch and balsam fir. Wetland 142-04 is seasonally flooded (up to 12 inches noted by wetland scientists during field investigations) and displays evidence of hydrology, including water-stained leaves, drainage patterns, and surface scouring. Soils in the wetland are deep organics generally

comprised hemic material up to 18 inches deep underlain by a depleted silt loam. This wetland meets indicators A1 of the Field Indicators Manual.

1.4.4 Segment 4

Segment 4, approximately 16.4 miles in length, extends from Larrabee Road Substation in Lewiston, Maine to Surowiec Substation in Pownal, Maine. Segment 4 includes the rebuilding of the existing Section 62 and Section 64 115kV transmission lines between Crowley's Substation in Lewiston and Surowiec Substation in Pownal and between Larrabee Road Substation in Lewiston and Surowiec Substation, respectively. No clearing is proposed in the rebuild portions of the Project. Towns associated with NECEC Segment 4 include Lewiston, Auburn, Durham, and Pownal. Segment 4 is located within the Lower Androscoggin River and Presumpscot River Watersheds (HUC 8) and within the Central Maine Embayment Biophysical Region.

One hundred and thirty-two wetlands were identified, delineated, and mapped within the Segment 4 transmission line corridor (see Attachment A for Natural Resource Maps). Thirty-six wetlands are PEM wetlands, fifteen are PSS wetlands, two are PFO wetlands, fifty-five are PEM/PSS wetlands, eleven are PEM/PFO wetlands, eight are PSS/PFO wetlands, and four are PEM/PSS/PFO wetlands (Table 4). These wetlands receive sustaining hydrology from a high groundwater table, seepage, or inputs from adjacent waterbodies. Functions and values provided by wetlands within Segment 4 include groundwater recharge/discharge, sediment/shoreline stabilization, flood flow alteration, wildlife habitat, and sediment retention.

Table 4: Summary of Wetland Classes and Wetlands of Special Significance- Segment 4

	Non-WOSS	WOSS	Total
PEM	30	6	36
PSS	14	1	15
PFO	2	0	2
PEM/PSS	28	27	55
PEM/PFO	5	6	11
PSS/PFO	3	5	8
PEM/PSS/PFO	2	2	4
Unknown	0	1	1
Subtotal	84	48	132

The following are representative descriptions of the categories of wetlands that were encountered and mapped within the Segment 4 transmission line corridor.

1.4.4.1 Representative Wetland Descriptions: Non-WOSS

PEM (Palustrine Emergent Wetlands)

Thirty PEM wetlands of similar composition and characteristics (e.g., wet meadows) that do not meet the definition of WOSS were identified along Segment 4 (Table 4). Typical types of PEM wetland identified were portions of former agricultural fields and formerly forested wetlands that were cleared and are maintained as transmission line corridor. These wetlands are characterized by persistent vegetation dominated by graminoids and herbs, although scattered shrubs are sometimes present. Vegetation in the wet meadow communities is relatively consistent within Segment 4. Species with a graminoid growth habit that are common include cottongrass bulrush, lamp rush, fringed sedge, reed canary grass, dark-green bulrush, common fox sedge, and melic manna grass. Common herbs include sensitive fern, bristly dewberry, late goldenrod, broad-leaved cat-tail and aster species. Scattered shrubs and saplings are present in some of the PEM wetlands. These include winterberry, speckled alder, willow species, gray birch, yellow birch, steeple-bush, and meadowsweet.

PSS (Palustrine Scrub-Shrub Wetlands)

Fourteen PSS wetlands that do not meet the definition of WOSS were identified during field surveys (see Table 4). Similar to the PEM wetlands, many of the PSS wetlands on Segment 4 are formerly forested wetlands that have been maintained as transmission line corridor for many years. These scrub-shrub wetlands are typically dominated by dense stands of speckled alder and winterberry. Other shrubs and saplings are also present and include willow species, arrowwood, silky dogwood, meadowsweet, steplebush and red maple. Shade tolerant species such as sensitive fern, cinnamon fern, goldenrods and asters are generally present in the herb stratum.

PFO (Palustrine Forested Wetlands)

Two PFO wetlands, that do not meet the definition of WOSS, were identified along Segment 4 (Table 4). The PFO wetlands are dominated by red maple, green and ash. PFO wetlands within Segment 4 are located at the edge of the existing cleared transmission line corridor where tree clearing has not been performed. Common sapling and shrub species are arrowwood, green ash, and meadowsweet. Sensitive fern and equisetum are common herbs.

PEM/PSS (Palustrine Emergent/Scrub-Shrub Wetlands)

Twenty-eight PEM/PSS wetlands which do not meet the definition of WOSS were identified during field surveys along Segment 4 (Table 4). Wetlands within the existing transmission line corridor are a mixture of emergent and scrub-shrub components, both of which are typical of what is described in the above PEM and PSS representative wetland descriptions.

Soils and Hydrology in PEM, PSS, PFO, and PEM/PSS Communities

Soil profiles within these wetlands are generally characterized by an organic surface horizon and/or a dark A horizon with matrix values less than or equal to 3 and chromas of 2 or less. Subsoils are commonly characterized by a depleted Bg horizon with matrix values of 4 or more and a chroma of 2 or less with redoximorphic features. Surface horizons are underlain by Cg horizons in some alluvial soils. Soil textures range from sand to silty clay loam, although silty textured soils are most common. Occasional organic soils are found, generally with sapric horizons at between 6 and 16 inches deep. Most soils meet criteria A2, F3 and A11 of the Field Indicators of Hydric Soils of the United States Manual, Version 8.0. Wetland hydroperiods are typically seasonally saturated, although seasonally flooded areas are also present. All of these wetlands appear to receive some hydrologic inputs from groundwater as well as surface runoff. Soils were generally saturated at the time of investigation and free water in the pit was often observed within 12 inches of the soil surface.

1.4.4.2 Representative Wetland Descriptions: WOSS

On Segment 4, forty-eight wetlands were identified as WOSS. Some wetlands (or portions thereof) within the Segment 4 transmission line corridor are WOSS because they are located in the 100-year flood zone (see floodplain maps in Attachment A); contain greater than 20,000 square feet of emergent marsh vegetation and/or open water; contain SVPs or PSVPs; contain moderate or high value IWWH; contain a river, stream, or brook; and/or contain peatland. Additionally, any freshwater wetland located within 250 feet of a great pond is WOSS. Six WOSS are PEM wetlands, one is a PSS wetland, twenty-seven are PEM/PSS wetlands, six are PEM/PFO wetlands, five are PEM/PSS wetlands, and two are PEM/PSS/PFO wetlands (Table 4).

The following narratives provide specific information on vegetation, soils, and hydrology for four representative wetlands identified along Segment 4 that meet the criteria for designation as WOSS.

Wetland 146-04

Wetland 146-04 is a riparian PSS wetland that runs along Stetson Brook. This wetland is located within the CMP Section 3026 transmission line corridor in the town of Lewiston, Maine. This wetland contains a brook; therefore, the wetland area within 25 feet of Stetson Brook is a WOSS. Stetson Brook is a 50-foot wide perennial stream with sand/silt substrate within the Project corridor.

Dominant herbaceous vegetation within the wetland includes bluejoint grass, sensitive fern, dewberry, and wrinkle-leaf goldenrod. Speckled alder and winterberry are dominant in the shrub layer of this wetland; other shrubs include arrowwood, silky dogwood, and meadowsweet. This wetland has a seasonally flooded hydroperiod. Signs of wetland hydrology include surface scouring, and drainage patterns. Soils have a silt loam texture with a deep 12-inch dark A horizon, and a depleted B horizon that extends to 15 inches below the soil surface. The soil profile meets hydric criterion F3 of the Field Indicators Manual.

Wetland 152-01

Wetland 152-01 is A PEM dominated wetland located in the city of Lewiston. This wetland traverses the transmission corridor and has a small area that extends into the woods on the west side of the corridor. This wetland contains a mapped deer wintering area, considered a significant wildlife habitat; therefore, the wetland is considered a WOSS.

Dominant vegetation within the wetland includes woolgrass, fringed sedge, shallow sedge, sensitive fern, broad-leaved cattail, rattlesnake manna grass, and Canadian rush. Scrub-shrub vegetation includes meadowsweet, winterberry, speckled alder, and arrowwood. This wetland has a seasonally flooded and saturated hydroperiod. Signs of wetland hydrology include surface scouring, drainage patterns, and surface water. Soils are comprised of a single depleted B horizon with silt loam texture greater than 12 inches thick with distinct redox. The A horizon was not apparent within the soil profile. These soils meet hydric criterion F2 of the Field Indicators Manual.

Wetland 155-03

Wetland 155-03 is a seasonally flooded to seasonally saturated PEM wetland located in the city of Lewiston. The wetland is located entirely within a FEMA mapped 100-year flood zone; therefore, the wetland is WOSS.

Wetland 155-03 is an agricultural swale along the side of harvested corn fields, therefore there are no shrub or tree strata. The herbaceous vegetation includes Canada bluejoint, reed canary grass, soft rush, hairy sedge, woolgrass, and shallow sedge. Evidence of wetland hydrology in this wetland includes saturated and seasonally flooded hydroperiod. Additional hydrology indicators include drainage patterns and surface scouring. The A horizon has a sandy loam texture with a dark matrix color. The A horizon is underlain by a depleted Bg horizon with a silt loam texture. These soils meet criterion F3 and F6 of the Field Indicators Manual.

Wetland 159-08

Wetland 159-08 is a large PEM wetland with minor areas of PSS throughout located in the city of Lewiston. The wetland is a PEM wetland larger than 20,000 square feet and is, therefore, a WOSS.

Dominant herbaceous vegetation includes woolgrass, russett sedge, bugleweed, and swamp dewberry. Dominant shrub species include speckled alder, meadowsweet, and maleberry. The wetland shows signs of saturation. Indicators of hydrology include water-stained leaves, and watermarks. The wetland has an 8 inch sapric organic layer above the soil surface. A 4-inch A horizon of clay loam is underlain by a depleted Bg horizon of clay; this soil meets indicator F3 and F7 of the Field Indicators Manual.

1.4.5 Segment 5

Segment 5, approximately 26.5 miles, extends from Coopers Mills Substation in Windsor, Maine to Maine Yankee Substation in Wiscasset, Maine. Segment 5 includes existing 270-foot wide CMP Section 392. No clearing is proposed in Segment 5 of The Project. Towns associated with NECEC Segment 5 include Windsor, Whitefield, Alna, Wiscasset, and Woolwich. Segment 5 is located within the Lower Kennebec River and St. George-Sheepscot River Watersheds (HUC 8) and is within the Central Maine Embayment Biophysical Region.

One hundred and fifty-seven wetlands were identified, delineated, and mapped within the Segment 5 transmission line corridor (see Attachment A for Wetland and Stream Resource Maps). Twenty-eight wetlands are PEM wetlands, forty-seven are PSS wetlands, three are PFO wetlands, sixty-five are PEM/PSS wetlands, two are PEM/PFO wetlands, one is a PSS/PFO wetland and six are PEM/PSS/PFO wetlands, and (Table 5).

These wetlands receive sustaining hydrology from a high groundwater table, seepage, or inputs from adjacent waterbodies. Functions and values provided by wetlands within Segment 5 include groundwater recharge/discharge, nutrient removal, sediment/shoreline stabilization, floodflow alteration, wildlife habitat, and sediment retention.

Table 5: Summary of Wetland Classes and Wetlands of Special Significance- Segment 5

	Non-WOSS	WOSS	Total
PEM	13	15	28
PSS	28	19	47
PFO	1	2	3
PEM/PSS	26	39	65
PEM/PFO	0	2	2
PSS/PFO	0	1	1
PEM/PSS/PFO	2	4	6
Unknown	4	1	5
Subtotal	70	81	157

The following are representative descriptions of the categories of wetlands that were encountered and mapped within the Segment 5 transmission line corridor.

1.4.5.1 Representative Wetland Descriptions: Non-WOSS

PEM (Palustrine Emergent Wetlands)

Thirteen PEM wetlands of similar composition and characteristics (e.g., wet meadows) that do not meet the definition of WOSS were identified along Segment 5 (Table 5). Typical types of PEM wetland identified were portions of former agricultural fields and formerly forested wetlands that were cleared and are maintained as transmission line corridor. These wetlands are characterized by persistent vegetation dominated by graminoids and herbs, although scattered shrubs are sometimes present. Vegetation in the wet meadow communities is relatively consistent within Segment 5. Species with a graminoid growth habit that are common include cottongrass bulrush, lamp rush, fringed sedge, reed canary grass, dark-green bulrush, common fox sedge, and melic manna grass. Common herbs include sensitive fern, bristly dewberry, late goldenrod, broad-leaved cat-tail and aster species. Scattered shrubs and saplings are present in some of the PEM wetlands. These include winterberry, speckled alder, willow species, gray birch, yellow birch, steeple-bush, and meadowsweet.

PSS (Palustrine Scrub-Shrub Wetlands)

Twenty-eight PSS wetlands that do not meet the definition of WOSS were identified during field surveys (see Table 5). Similar to the PEM wetlands, many of the PSS wetlands on Segment 5 are formerly forested wetlands that have been maintained as transmission line corridor for many years. These scrub-shrub wetlands are typically dominated by dense stands of speckled alder and winterberry. Other shrubs and saplings are also present and include willow species, arrowwood, silky dogwood, meadowsweet, steplebush and red maple. Shade tolerant species such as sensitive fern, cinnamon fern, goldenrods and asters are generally present in the herb stratum.

PFO (Palustrine Forested Wetland)

One PFO wetland which does not meet the definition of WOSS, was identified during field surveys (Table 5). This wetland is dominated by red maple, and green ash. It is located at the edge of the existing cleared transmission line corridor. Common sapling and shrub species are arrowwood, green ash, and meadowsweet. Sensitive fern and equisetum are common herbs.

PEM/PSS (Palustrine Emergent/Scrub-Shrub Wetlands)

Twenty-six PEM/PSS wetlands that do not meet the definition of WOSS were identified during field surveys along Segment 5 (Table 5). These wetlands are dominated by an approximately even mix of herbaceous and scrub-shrub vegetation. The emergent and scrub-shrub components are typical of what is described in the above PEM and PSS representative wetland descriptions.

Soils and Hydrology in PEM, PSS, PFO, and Mixed Communities

Soil profiles within these wetlands are generally characterized by an organic surface horizon and/or a dark A horizon with matrix values less than or equal to 3 and chromas of 2 or less. Subsoils are commonly characterized by a depleted Bg horizon with matrix values of 4 or more and a chroma of 2 or less with redoximorphic features. Soil textures range from silt loam to loamy sand, although silt loam and sandy loam soils are the most common. Most soils meet criteria F3, F6, and S5 of the Field Indicators of Hydric Soils of the United States Manual, Version 8.0. Soils were generally saturated at the time of investigation and free water was often observed in the pit within 12 inches of the soil surface.

Wetlands along Segment 5 are generally relatively flat, non-sloping wetlands, accordingly, the wetland hydroperiods are typically seasonally saturated and flooded areas are also present. ATV/four-wheel drive ruts are present in wetlands along this segment. Indicators of hydrology include surface water, high water table, saturation, water stained leaves, sediment deposits, and drainage patterns.

1.4.5.2 Representative Wetland Descriptions: WOSS

On Segment 5, eighty-three wetlands were identified as WOSS. Some wetlands (or portions thereof) within the Segment 5 transmission line corridor are WOSS because they are located in the 100-year flood zone (see floodplain maps in Appendix A); contain greater than 20,000 square feet of emergent marsh vegetation and/or open water; contain SVPs or a PSVP; contain T&E species habitat; and/or are associated with a river, stream or brook. Fifteen WOSS are PEM wetlands, nineteen are PSS wetlands, two are PFO wetlands, thirty-nine are PEM/PSS wetlands, two are PEM/PFO wetlands, 1 is PSS/PFO wetland, and 4 are PEM/PSS/PFO wetlands (Table 5).

The following narratives provide specific information on vegetation, soils, and hydrology for five representative wetlands identified along Segment 5 that meet the criteria for designation as WOSS.

Wetland 162-04

Wetland 162-04 is a large, predominantly PEM wetland in the town of Windsor, which also contains an area of PSS wetland habitat off site. The wetland contains significant wildlife habitat due to a PSVP, as well as habitat for a T&E freshwater mussel species, the brook floater, therefore, the wetland is WOSS. Additionally, wetland 162-04 is traversed by a 6 to 10-foot wide perennial stream which is an unnamed tributary to the West Branch of the Sheepscot River. An intermittent stream also traverses the wetland at the northeast end of the wetland, closer to Coopers Mill Road. The wetland area located within 25 feet of the stream is considered a WOSS. The wetland also contains two natural non-significant vernal pools.

In emergent components of the wetland, mostly within the maintained pipeline and transmission line corridors, dominant species include cinnamon fern, broad-leaf cattail, Canada bluejoint, and sensitive fern. Dominant species in the scrub-shrub components include speckled alder, common winterberry, and viburnum species. Outside the transmission line corridor, the wetland vegetation is dominated by a mix of trees and shrubs, most notably red maple, balsam fir, green ash, common winterberry, and speckled alder. Evidence of hydrology in the wetland includes portions that are seasonally flooded, saturated soils, water stained leaves, drift lines, buttressed and elevated roots, and drainage patterns. Soils in the wetland have a silt loam texture, and display a dark topsoil horizon with redoximorphic concentrations, underlain by a horizon with a depleted matrix. These soils meet indicator F3 of the Field Indicators Manual.

Wetland 167-01

Wetland 167-01 is a large PEM wetland located along the transmission line corridor in the Town of Whitefield. The wetland contains greater than 20,000 square feet of PEM and is contiguous with greater

than 20,000 square feet of POW and the wetland contains significant wildlife habitat (IWWH); therefore, the wetland is WOSS.

Wetland 167-01 is bisected on the western end by Coopers Road and extends southeast outside the transmission line corridor where the wetland turns to POW. A small portion along the northern edge of the wetland is PSS. The wetland shows signs of extensive beaver activity as well as impressive wildlife habitat. Dominant herbaceous vegetation includes woolgrass, Canary reed grass, rattlesnake mannagrass, sedge species, and patches of purple loosestrife. Shrub species include Labrador tea, steeplebush, and scattered speckled alder. The soil profile is a very dark 16 inch sapric organic layer which keys out to indicator A1 of the Field Indicators Manual. This wetland has a seasonally flooded hydroperiod. Signs of wetland hydrology include water marks and drainage patterns.

Wetland 169-02

Wetland 169-02 is a PSS wetland located within the transmission line corridor in the town of Whitefield. The wetland runs roughly southwest and is fed hydrologically by stream runoff. The wetland contains two streams, and one potential significant vernal pool and significant wildlife habitat identified as deer wintering area; therefore, the wetland is WOSS.

Dominant shrub vegetation in the wetland includes speckled alder, water hemlock, and elderberry. Herbaceous vegetation includes woolgrass, broad-leaved cat-tail, aster species, rattlesnake mannagrass, and smooth goldenrod. Seasonal saturation, water-stained leaves, surface scouring, and water marks are evident. The silt-loam textured soils were comprised of a thin Ap horizon and a depleted B horizon beginning 4 inches below the soil surface. The soils key to indicator F3 of the Field Indicators Manual.

Wetland 178-06

Wetland 178-06 is a PSS wetland, located in the town of Alna. Wetland 178-06 contains significant wildlife habitat (deer wintering area), thus the wetland is WOSS. In addition, the wetland within the transmission line corridor is a riparian wetland associated with Trout Brook, therefore; the wetland area within 25 feet of the brook is WOSS.

Dominant shrub vegetation includes speckled alder, meadowsweet, and steeplebush. Dominant herbaceous vegetation includes rattlesnake mannagrass, bluejoint grass, woolgrass, soft rush, and tussock sedge. The wetland is seasonally flooded and many overflow channels exist throughout the wetland created by surface water action caused by beaver activity. Indicators of hydrology include water-stained

leaves, silt deposition, watermarks, drift lines, surface scouring, and drainage patterns. Two inches of a sapric organic horizon overlay the mucky silt loam soil surface. The soil keys to indicators F1, F3, and F6 of the Field Indicators Manual.

Wetland 188-17

Wetland 188-17 is a PEM/PSS wetland located adjacent to the Maine Yankee substation site in the town of Wiscasset. The wetland contains an intermittent stream. Additionally, the wetland is located within 250 feet of a coastal wetland; therefore, the wetland is WOSS.

Herbaceous vegetation is dominant within the wetland, with shrubs scattered throughout. Representative vegetation includes broad-leaved cattail, soft rush, sensitive fern, woolgrass, bulrush, and broom sedge, with meadowsweet shrubs scattered throughout the wetland. Soils are seasonally flooded, and drainage patterns are evident. The disturbed soil profile contains sandy loam down to refusal. A depleted Bg horizon is present to four inches, underlain by a dark C. Both layers have prominent redox concentrations. The soil keys to indicator F6 of the Field Indicators Manual. The wetland is impounded by the Maine Yankee access road.

1.5 Delineation Results – Substations

The Fickett Road Substation, Merrill Road Converter Station, and West Forks and Moxie Gore Termination Stations sites, and the areas around them, were each surveyed for wetlands within the area of proposed development. Wetlands were identified at each site.

Upgrades and modifications are proposed for six substations: Larrabee Road Substation (Lewiston), Crowley's Substation (Lewiston), Surowiec Substation (Pownal), Raven Farm Substation (Cumberland), Coopers Mills Substation (Windsor), and Maine Yankee Substation (Wiscasset); no expansion of the footprint will occur and work will be limited to the area inside of the existing fence line for each site.

Non-WOSS wetlands were identified at the Merrill Road site. Wetlands (or portions thereof) were identified as WOSS at the proposed Merrill Road Converter Station site and Fickett Road substation site. For a detailed description of all characteristics that trigger WOSS designation, please see Section 1.3 Wetlands of Special Significance Determinations.

A summary of the wetlands identified within the substation sites, including identification number, and summary of respective classifications is provided in Attachment B-1 of this Application, located at the

end of this section. Detailed descriptions of each wetland identified at the substations are provided in the following subsections.

1.5.1 Merrill Road Converter Station

The Merrill Road Converter Station is proposed to be sited north of Merrill Road in Lewiston, Maine and will occupy approximately seven acres. A new, approximately 1.2-mile 345kV transmission line within an existing, partially developed 400-foot wide transmission line corridor (Section 200) will be required to connect the converter station with the Larrabee Road Substation.

Three wetlands were identified, delineated, and mapped within the Merrill Road Converter Station survey area (see Attachment A for Wetland and Stream Resource Maps). Two wetlands are PFO wetlands and one is PEM/PSS wetland (Table 6). These wetlands receive sustaining hydrology primarily from a high groundwater table or seepage and, in some cases, they are associated with small, ephemeral drainages. One small intermittent stream flows through the northeast corner of the survey area.

Table 6: Summary of Wetland Classes and Wetlands of Special Significance-
Merrill Road Converter Station

	Non-WOSS	WOSS	Total
PFO	1	1	2
PEM/PSS	0	1	1
Subtotal	1	2	3

The following are representative descriptions of the wetlands encountered and mapped within the Merrill Road Converter Station survey area.

1.5.1.1 Representative Wetland Descriptions: Non-WOSS

PFO (Palustrine Forested Wetlands)

One PFO wetland that does not meet the definition of WOSS was identified on the Merrill Road Converter Station survey area (Table 6). This wetland is dominated by red maple, gray birch, balsam fir, and black ash. Common saplings include black ash and balsam fir. Shrubs such as winterberry are also present where the canopy opens. Herbaceous species common in PFO wetlands along the Merrill Road Converter survey area include cinnamon fern, fringed sedge and balsam fir seedlings. Pockets of sphagnum moss were also observed.

Soils and Hydrology in PFO Communities

Wetlands within the Merrill Road Converter Station survey area are generally characterized by soils with an organic surface horizon about eight inches thick with rock refusal below. Soil textures consist of fibric organic material where plant fibers are partially decomposed. These soils meet criteria A1, histosols, of the Field Indicators Manual. Soils were saturated at the time of inspections and surface water, and water stained leaves were observed.

Wetland hydroperiods are seasonally saturated, although seasonally flooded areas are also present.

Wetlands appear to receive some hydrologic inputs from a high groundwater table and seepage. These wetlands receive runoff from adjacent uplands and are located on areas of flat terrain.

1.5.1.2 Representative Wetland Descriptions: WOSS

Within the Merrill Road Converter Station survey area, two wetlands were identified as WOSS. Portions of one wetland, 145-1, within the Merrill Road Converter Station survey area is WOSS because it is associated with an intermittent stream. A second wetland, 145-02, within the survey area is WOSS because it contains a PSVP (Table 6).

The following narratives provide specific information on vegetation, soils, and hydrology for the two wetlands identified within the Merrill Road Converter Station survey area that meet the criteria for designation as WOSS.

Wetland 145-01

Wetland 145-01 is located both within Segment 4 of the CMP transmission line corridor and within the adjacent Merrill Road Converter Station survey area in Lewiston, Maine. This PEM wetland with sub-components of PSS wetland is large and consists of several fingers that extend east from the cleared CMP transmission line into the Merrill Road Converter Station survey area. Wetland 145-01 contains one intermittent stream located at the northeast corner of the Merrill Road Converter survey area. The stream emerges from a seep within the CMP transmission corridor and is about two feet wide at its widest point. It flows west into wetland 145-01 and continues north, off the survey area. Wetland area within 25 feet of the stream is WOSS.

Dominant species in the herbaceous stratum of the wetland include broad-leaved cat-tail, sensitive fern, Canada bluejoint, late goldenrod and cottongrass bulrush. Dominant shrub species within the smaller

PSS wetland component include speckled alder, arrowwood and meadowsweet. Wetland 145-01 is a seasonally flooded and saturated wetland with several indicators of hydrology including 4 inches of standing water, surface scouring and drainage patterns. The soils observed in the wetland include a shallow organic horizon underlain by silt loam with a depleted matrix. This wetland meets indicator F3 of the Field Indicators Manual.

Wetland 145-02

Wetland 145-02 is a seasonally flooded to saturated PFO wetland with inclusions of shrub growth. It is located within the Merrill Road Converter Station survey area in the town of Lewiston. This wetland contains a PSVP; therefore, the wetland is WOSS. This natural pool had multiple rafts of wood frog egg masses within the deeper areas. Greater than 75 wood frog egg masses and greater than 25 spotted salamander egg masses were observed in this pool during a spring field visit. Four non-significant natural vernal pools were identified. In general, these natural vernal pools are shallow pools within wetlands and contained low numbers of spotted salamander egg masses and no wood frog egg masses. In addition, three depressions of anthropogenic origin were identified. These depressions are generally ruts within an existing wetland.

Dominant herbaceous vegetation in this wetland includes cinnamon fern, sensitive fern, fringed sedge, and tussock sedge, as well as vast areas of sphagnum moss cover. Balsam fir, red maple and gray birch saplings are common non-dominant shrubs. The canopy is dominated by red maple, northern white-cedar, black ash, gray birch, and balsam fir. Indicators of hydrology include isolated areas of surface water, water-stained leaves, drainage patterns, stunted or stressed plants, and microtopographic relief. The wetland is both seasonally flooded and saturated. Soils are comprised of deep, sapric organic material greater than 20 inches deep, which meet hydric criterion A1 of the Field Indicators Manual.

1.5.2 Fickett Road Substation

Fickett Road Substation is a proposed substation facility on approximately 6.12 acres adjacent to Fickett Road in Pownal.

One wetland was identified, delineated, and mapped within the Fickett Road Substation survey area (see Appendix A for Wetland and Stream Resource Maps). Wetland 161-16 is a PEM/PSS wetland that is WOSS as identified in Table 8 below. This wetland receives sustaining hydrology from a high groundwater table, seepage, surface runoff from adjacent uplands, and inputs from adjacent streams.

**Table 7: Summary of Wetland Classes and Wetlands of Special Significance –
Fickett Road Substation**

	Non-WOSS	WOSS	Total
PEM	0	1	0
Subtotal	0	1	1

The following is a description of wetland 161-16 encountered and mapped within the Fickett Road Substation survey area.

1.5.2.1 Representative Wetland Descriptions: Non-WOSS

No non-WOSS wetlands were identified within the Fickett Road Substation survey area (Table 7).

1.5.2.2 Representative Wetland Descriptions: WOSS

Within the Fickett Road Substation survey area, one wetland was identified as WOSS. A portion of wetland 161-16 within the Fickett Road Substation survey area is WOSS because it contains a river, stream or brook. Wetland 161-16 is a PEM wetland (Table 7).

The following narrative provides specific information on vegetation, soils, and hydrology for wetland 161-16 which meets the criteria for designation as WOSS.

Wetland 161-16

Wetland 161-16 is a PEM wetland located within the Fickett Road Substation survey area in the town of Pownal. A majority of the wetland is a mowed wet meadow wetland with a small sub-component of PSS. The wetland is associated with Runaround Brook (P-STR-161-3); therefore, wetland area within 25 feet of the brook is WOSS.

Dominant herbaceous vegetation includes dark-green bulrush, three-way sedge, broadleaf cattail, cottongrass bulrush, fringed sedge, shallow sedge, blunt spike rush, blue flag iris, and goldenrod species. Shrub and sapling species include meadowsweet, winterberry, speckled alder, and arrowwood. The wetland is generally saturated and indicators of hydrology include water-stained leaves, water-marks, and drainage patterns. Soils in the wetland are generally comprised of a fine-grained (silt loam) horizon with a depleted matrix underlying a thin organic or topsoil horizon. This soil meets indicator F3 of the Field Indicators Manual. This wetland is often mowed and has been ditched and plowed in the past.

Table 8: Glossary for WOSS and Non-WOSS

Acronym	Term
CH	Channel
DWA	Deer Wintering Area
Int	Intermittent
NVP	Natural Vernal Pool
Per	Perennial
PSVP	Potentially Significant Vernal Pool
SC	Special Concern
SVP	Significant Vernal Pool
T&E	Threatened & Endangered
Trib	Tributary
IWWH	Inland Waterfowl and Wading Bird Habitat

Table 9: NECEC Wetland Vegetation List

Common Name	Binomial Name
American elm	<i>Ulmus americana</i>
American mannagrass	<i>Glyceria grandis</i>
appressed bog clubmoss ⁴	<i>Lycopodiella appressa</i> ⁴
arrowhead species	<i>Sagittaria sp.</i>
arrow-leaved tearthumb	<i>Persicaria sagittata</i> <i>Polygonum sagittatum</i> ⁵
arrowwood	<i>Viburnum dentatum var. lucidum</i>
aster species	<i>Aster spp.</i>
avens species	<i>Geum sp.</i>
awned sedge ²	<i>Carex atherodes</i> ²
balsam fir	<i>Abies balsamea</i>
barnyard grass	<i>Echinochloa crus-galli</i>
barber pole sedge ¹	<i>Scirpus microcarpus</i> ⁵
beaked hazelnut	<i>Corylus cornuta</i>
bedstraw species	<i>Galium sp.</i>
bentgrass species	<i>Agrostis sp.</i>
birch species	<i>Betula spp.</i>
black ash	<i>Fraxinus nigra</i>
black bulrush	<i>Scirpus atrovirens</i>
black chokeberry	<i>Photinia melanocarpa</i>
black gum	<i>Nyssa sylvatica</i>
black spruce	<i>Picea mariana</i>
black willow	<i>Salix nigra</i>
black-girdled wool-grass	<i>Scirpus atrocinctus</i>
bladder sedge ¹	<i>Carex intumescens</i>
blue vervain	<i>Verbena hastata</i>
blunt spike-rush	<i>Eleocharis obtusa</i>
boneset	<i>Eupatorium perfoliatum</i>
boneset species	<i>Eupatorium sp.</i>
box-elder	<i>Acer negundo</i>
bracken fern	<i>Pteridium aquilinum var. latiusculum</i>
bristly black currant	<i>Ribes lacustre</i>
broad-leaved cat-tail	<i>Typha latifolia</i>
bulrush species	<i>Schoenoplectus sp.</i>

Common Name	Binomial Name
bulrush species	<i>Scirpus sp.</i>
bunchberry	<i>Cornus canadensis</i>
bur oak	<i>Quercus macrocarpa</i>
bur-reed species ¹	<i>Sparganium sp.</i>
buttercup species	<i>Ranunculus spp.</i>
buttonbush	<i>Cephalanthus occidentalis</i>
Canada bluejoint	<i>Calamagrostis canadensis</i>
Canada mayflower	<i>Maianthemum canadense</i>
Canada rush	<i>Juncus canadensis</i>
choke cherry	<i>Prunus virginiana</i>
cinnamon fern	<i>Osmunda cinnamomea</i>
clammy azalea	<i>Rhododendron viscosum</i>
Columbia water-meal ²	<i>Wolffia columbiana</i> ²
common arrowhead	<i>Sagittaria latifolia</i>
common blackberry	<i>Rubus allegheniensis</i>
common buckthorn	<i>Rhamnus cathartica</i>
common buttercup	<i>Ranunculus acris</i>
common elder	<i>Sambucus canadensis</i>
common evening-primrose	<i>Oenothera biennis</i>
common flat-topped goldenrod grass-leaved goldenrod	<i>Euthamia graminifolia</i>
common goldenrod	<i>Solidago canadensis</i>
common horsetail	<i>Equisetum arvense</i>
common juniper	<i>Juniperus communis var. depressa</i>
common reed	<i>Phragmites australis</i> <i>Phragmites communis</i> ⁵
common water-hemlock	<i>Cicuta maculata</i>
cotton-grass species	<i>Eriophorum spp.</i>
cow vetch	<i>Vicia cracca</i>
cranberry species	<i>Vaccinium sp.</i>
creeping bentgrass	<i>Agrostis stolonifera</i> <i>Agrostis alba</i> ⁵
creeping spike-rush	<i>Eleocharis palustris</i>
curly dock	<i>Rumex crispus</i>
devil's beggar ticks	<i>Bidens frondosa</i>
dogwood species	<i>Cornus spp.</i>
drooping sedge	<i>Carex crinita</i>
dwarf raspberry	<i>Rubus pubescens</i>

Common Name	Binomial Name
eastern hemlock	<i>Tsuga canadensis</i>
eastern lined aster	<i>Symphotrichum lanceolatum</i>
eastern white pine	<i>Pinus strobus</i>
Eaton's bur-marigold ²	<i>Bidens eatonii</i> ²
estuary bur-marigold ³	<i>Bidens hyperborea</i> ³
estuary monkeyflower ²	<i>Mimulus ringens</i> var. <i>colpophilus</i> ²
European alder-buckthorn	<i>Frangula alnus</i> <i>Rhamnus frangula</i> ⁵
evergreen wood fern	<i>Dryopteris intermedia</i> x <i>triploidea</i>
false hellebore	<i>Veratrum viride</i>
false nettle	<i>Boehmeria cylindrica</i>
field-bindweed	<i>Convolvulus arvensis</i>
fireweed	<i>Epilobium angustifolium</i>
flat-topped white aster	<i>Doellingeria umbellata</i> <i>Aster umbellatus</i> ⁵
fleabane species	<i>Erigeron</i> sp.
fowl mannagrass	<i>Glyceria striata</i>
fowl meadowgrass	<i>Poa palustris</i>
fox sedge	<i>Carex vulpinoidea</i>
foxtail species	<i>Alopecurus</i> sp.
fresh water cordgrass	<i>Spartina pectinata</i>
Georgia bulrush ^{1, 4}	<i>Scirpus hattorianus</i> ⁴
giant bur-reed	<i>Sparganium eurycarpum</i>
goldenrod species	<i>Solidago</i> spp.
goldthread	<i>Coptis trifolia</i>
gray birch	<i>Betula populifolia</i>
greater poverty rush ^{1, 4}	<i>Juncus anthelatus</i> ⁴
green alder	<i>Alnus viridis</i>
green ash	<i>Fraxinus pennsylvanica</i>
hardstem bulrush	<i>Scirpus acutus</i>
highbush blueberry	<i>Vaccinium corymbosum</i>
highbush-cranberry	<i>Viburnum opulus</i> <i>Viburnum trilobum</i> ⁵
hobblebush	<i>Viburnum lantanoides</i>
honeysuckle species	<i>Lonicera</i> spp.
horsetail species	<i>Equisetum</i> spp.
inflated sedge	<i>Carex vesicaria</i>

Common Name	Binomial Name
interrupted fern	<i>Osmunda claytoniana</i>
Jack in the pulpit	<i>Arisaema triphyllum</i>
jewelweed	<i>Impatiens capensis</i>
jointweed	<i>Polygonella articulata</i>
Kentucky bluegrass	<i>Poa pratensis</i>
Labrador-tea	<i>Rhododendron groenlandicum</i>
lady fern	<i>Athyrium filix-femina</i>
lake bank sedge	<i>Carex lacustris</i>
larch	<i>Larix laricina</i>
large cranberry	<i>Vaccinium macrocarpon</i>
large yellow pond-lily ²	<i>Nuphar advena</i> ²
leatherleaf	<i>Chamaedaphne calyculata</i>
long sedge	<i>Carex folliculata</i>
long-beaked willow	<i>Salix bebbiana</i>
maleberry	<i>Lyonia ligustrina</i>
maple-leaved viburnum	<i>Viburnum acerifolium</i>
marsh bedstraw	<i>Galium palustre</i>
marsh bulrush ^{1,2}	<i>Bolboschoenus novae-angliae</i> ²
marsh fern	<i>Thelypteris palustris</i> var. <i>pubescens</i>
marsh horsetail	<i>Equisetum palustre</i>
marsh St. Johnswort	<i>Triadenum virginicum</i> <i>Hypericum virginicum</i> ⁵
meadow spikemoss ²	<i>Selaginella apoda</i> ²
meadow-rue species	<i>Thalictrum</i> sp.
meadowsweet	<i>Spiraea alba</i> var. <i>latifolia</i>
milfoil species	<i>Myriophyllum</i> sp.
morrow's honeysuckle	<i>Lonicera morrowii</i>
mountain holly	<i>Nemopanthus mucronatus</i>
musclewood	<i>Carpinus caroliniana</i>
nannyberry	<i>Virburnum lentago</i>
narrow-leaved cat-tail	<i>Typha angustifolia</i>
needletip blue-eyed grass ^{1,4}	<i>Sisyrinchium mucronatum</i> ⁴
New England aster	<i>Symphotrichum novae-angliae</i>
New York aster	<i>Symphotrichum novi-belgii</i>
New York fern	<i>Thelypteris noveboracensis</i>
nodding beggar ticks	<i>Bidens cernua</i>
nodding sedge	<i>Carex gynandra</i>
northeastern mannagrass	<i>Glyceria melicaria</i>

Common Name	Binomial Name
northern blazing star ²	<i>Liatris scariosa</i> var. <i>novae-angliae</i> ²
northern blue flag	<i>Iris versicolor</i>
northern bog goldenrod	<i>Solidago uliginosa</i>
northern dewberry	<i>Rubus flagellaris</i>
northern red oak	<i>Quercus rubra</i>
northern swamp dogwood	<i>Cornus racemosa</i>
northern water-horehound	<i>Lycopus uniflorus</i>
northern white-cedar	<i>Thuja occidentalis</i>
old-field cinquefoil	<i>Potentilla simplex</i>
orchard grass	<i>Dactylis glomerata</i>
ostrich fern	<i>Matteuccia struthiopteris</i> var. <i>pennsylvanica</i>
pale green orchid ²	<i>Platanthera flava</i> var. <i>herbiola</i> ²
Parker's pipewort ³	<i>Eriocaulon parkerii</i> ³
pendulous bulrush ²	<i>Scirpus pendulus</i> ²
Pennsylvania smartweed	<i>Persicaria pennsylvanica</i>
pickerelweed	<i>Pontederia cordata</i>
pitcher plant	<i>Sarracenia purpurea</i>
pointed broom sedge	<i>Carex scoparia</i>
poison-ivy	<i>Toxicodendron radicans</i>
pondweed species	<i>Potamogeton</i> sp.
purple loosestrife	<i>Lythrum salicaria</i>
purple-stemmed aster	<i>Symphotrichum puniceum</i>
pussy willow	<i>Salix discolor</i>
quaking aspen	<i>Populus tremuloides</i>
quillwort species	<i>Isoetes</i> sp.
raspberry species	<i>Rubus</i> sp.
rattlesnake mannagrass	<i>Glyceria canadensis</i>
red maple	<i>Acer rubrum</i>
red osier dogwood	<i>Cornus sericea</i> <i>Cornus stolonifera</i> ⁵
red raspberry	<i>Rubus idaeus</i>
red spruce	<i>Picea rubens</i>
red-stemmed gentian ²	<i>Gentiana rubricaulis</i> ²
redtop	<i>Agrostis gigantea</i>
reed canary grass	<i>Phalaris arundinacea</i>
rhodora	<i>Rhododendron canadense</i>
rice-cut grass	<i>Leersia oryzoides</i>
rough bedstraw	<i>Galium asprellum</i>

Common Name	Binomial Name
rough-stemmed goldenrod	<i>Solidago rugosa</i>
round-leaved eupatorium ²	<i>Eupatorium rotundifolium</i> var. <i>ovatum</i> ²
royal fern	<i>Osmunda regalis</i> var. <i>spectabilis</i>
rush species	<i>Juncus</i> spp.
sallow sedge	<i>Carex lurida</i>
saltmeadow cordgrass	<i>Spartina patens</i>
screwstem ²	<i>Bartonia paniculata</i> ²
seaside goldenrod	<i>Solidago sempervirens</i>
seaside plantain	<i>Plantago maritima</i> var. <i>juncoides</i>
sedge species	<i>Carex flava</i> , <i>palacea</i>
sedge species	<i>Carex</i> spp.
sensitive fern	<i>Onoclea sensibilis</i>
sessile-fruited arrowhead ²	<i>Sagittaria rigida</i> ²
sheep laurel	<i>Kalmia angustifolia</i>
silky dogwood	<i>Cornus amomum</i>
silky willow	<i>Salix pellita</i>
silverweed	<i>Argentina anserina</i>
skunk-cabbage	<i>Symplocarpus foetidus</i>
slender willow	<i>Salix petiolaris</i>
small reedgrass ³	<i>Calamagrostis cinnoides</i> ³
smooth aster	<i>Symphyotrichum laeve</i>
smooth goldenrod	<i>Solidago gigantea</i>
smooth hedge-nettle ⁴	<i>Stachys tenuifolia hispida</i> ⁴
smooth winterberry ³	<i>Ilex laevigata</i> ³
soft rush	<i>Juncus effusus</i>
softstem bulrush	<i>Schoenoplectus tabernaemontanii</i>
speckled alder	<i>Alnus incana</i> spp. <i>rugosa</i>
spike-rush species	<i>Eleocharis</i> sp.
spreading sedge ²	<i>Carex laxiculmis</i> ²
steeple-bush	<i>Spiraea tomentosa</i>
sugar maple	<i>Acer saccharum</i>
swamp candles	<i>Lysimachia terrestris</i>
swamp dewberry	<i>Rubus hispidus</i>
swamp milkweed	<i>Asclepias incarnata</i>
swamp rose	<i>Rosa palustris</i>
swamp saxifrage ³	<i>Saxifraga pensylvanica</i> ³
swamp white oak ²	<i>Quercus bicolor</i> ²

Common Name	Binomial Name
sweet gale	<i>Myrica gale</i>
tall goldenrod	<i>Solidago altissima</i>
tall meadow-rue	<i>Thalictrum pubescens</i>
tawny cotton-grass	<i>Eriophorum virginicum</i>
three-nerved joe-pye weed ⁴	<i>Eupatorium dubium</i> ⁴
three-seeded sedge	<i>Carex trisperma</i>
tidal arrowhead	<i>Sagittaria calycina</i> var. <i>spongiosa</i>
timothy	<i>Phleum pratense</i>
toothwort species	<i>Cardamine</i> sp.
tussock sedge	<i>Carex stricta</i>
Walter's sedge ¹	<i>Carex striata</i>
water avens	<i>Geum rivale</i>
water-parsnip	<i>Sium suave</i>
white ash	<i>Fraxinus americana</i>
white sweet-clover	<i>Melilotus officinalis</i>
white turtlehead	<i>Chelone glabra</i>
white willow	<i>Salix alba</i>
wild calla	<i>Calla palustris</i>
wild garlic ²	<i>Allium canadense</i> ²
wild rye species	<i>Elymus</i> sp.
wild sarsaparilla	<i>Aralia nudicaulis</i>
wild-raisin	<i>Viburnum nudum</i> var. <i>cassinoides</i>
willow herb species	<i>Epilobium</i> sp.
willow species	<i>Salix</i> spp.
winterberry	<i>Ilex verticillata</i>
witch-hazel	<i>Hamamelis virginiana</i>
wood fern species	<i>Dryopteris</i> sp.
woodland horsetail	<i>Equisetum sylvaticum</i>
wool-grass	<i>Scirpus cyperinus</i>
yellow birch	<i>Betula alleghaniensis</i>
yellow water-lily	<i>Nuphar variegata</i>

¹ - common name not listed in Haines and Vining (1998)

² - MNAP-listed S1 or S2 plant

³ - MNAP-listed S3 plant

⁴ - MNAP-listed SU plant or plant not listed by MNAP

⁵ - synonym

1.5.3 West Forks and Moxie Gore Termination Stations

Wetlands adjacent to the HDD development areas were surveyed during the wetland field survey effort in 2015, consistent with the field survey methods described in Section 1.0 of this Report. Wetlands were also classified in the field using the USFWS classification system (Cowardin et al. 1979). Additionally, they were evaluated under the criteria for Wetland of Special Significance (“WOSS”). If a wetland did not meet this criteria, they were considered “Non-WOSS”.

Two wetlands are located adjacent to the Moxie Gore Termination Station.

WET-49-01 is located approximately 65 feet west of the HDD entry point. WET-49-01 is classified as Palustrine Forested (“PFO”), characterized as permanently saturated and consisting of broad-leaved deciduous trees. This wetland was determined to be Non-WOSS. As a result of the HDD installation, forested wetland conversion will now be avoided in WET-49-01.

WET-49-02 is located approximately 220 feet east of the Moxie Gore Termination Station. It is classified as PFO and is considered Non-WOSS. Forested wetland conversion impacts as a result of overhead transmission line construction will remain unchanged in WET-49-02, and there will be no additional impacts to WET-49-02 as a result of the HDD installation and construction of the Moxie Gore Termination Station.

WET-48-03 is located approximately 230 feet north of the West Forks Termination Station. WET-48-03 is classified as a Palustrine Forested/Palustrine Emergent (PFO/PEM), characterized as saturated with areas dominated by trees and shrubs and areas of emergent marshes. This wetland was determined to be Non-WOSS. Forested wetland conversion impacts as a result of overhead transmission line construction will remain unchanged in WET-48-03, and there will be no additional impacts to WET-48-03 as a result of the HDD installation and construction of the West Forks Termination Station.

CMP conducted natural resource surveys in October 2018 along access roads that will be used for construction of the HDD development and to gain access to the termination stations for maintenance and/or emergency response after construction. The land management road that extends from Fish Pond Road to the transmission corridor is an existing gravel roadbed which will require improvement, likely some tree trimming, widening, and grading. The gravel road has two areas which were surveyed and are in the process of reverting back to wetland conditions, totaling 11,279 square feet. Improvement of the access road will result in permanent wetland fill in this degraded area and is calculated within the Compensation Plan (Section 9.0). Photographs are provided in Exhibit E of this Report.

Exhibit A: Resource Verification Protocol Correspondence

2017 Resource Delineation Protocol (including previously mapped resources)
Jim Boyle Telephone Conversations with Jay Clement, Mike Mullen and Philip De Maynardier
April 2017

For new project areas not previously mapped, complete paired-plot (one wetland, one upland) data forms when you encounter meaningful changes in vegetative cover types or meaningful changes in soil, e.g., red maple swamp (and associated lower vegetative strata) with mineral soil shifting to black spruce swamp with organic soil, or similar changes. This method should normally result in a data forms for every running mile or so of transmission line, on average. The burden is on the wetland scientist to insure data forms are representative of the types of wetlands delineated across the entire project. In the project narrative describing the field delineation, the wetland scientist should group the wetland types, describe how the work was done, document that data forms were completed for each wetland type. For example, "Of thirty wetlands, ten were red maple swamps, three were black spruce swamps, ten were alder shrub wetlands, etc." Data forms and representative photographs should be submitted with project applications.

For portions of the project where wetlands and vernal pools were previously mapped, we will obtain data sheets and shapefiles of those mapped resources. We will install the shapefiles in GPS units, and verify five wetlands per mile, and verify one full Corps data form per mile. If we find a discrepancy, we will document our new resource delineation with a data forms, and flag the resource boundary as we see it now. We might find areas that we delineate now that were not previously delineated, or we might find the reverse. In either case, we will document our work. We will hang a flag at each verified resource with the resource number written on the flag, GPS-locate the flag and take a photograph. The wetland scientist will note his or her name on the data sheet and the date of the field visit. We will not flag or GPS-locate resource boundaries if we agree with them.

Vernal Pools

- If a VP was uploaded to IF&W GIS data layer, and if natural, no need to check.
- If a VP was uploaded to IF&W GIS data layer, but not natural, need to verify that the VP is not natural, and provide this documentation to IF&W and request removal, including a letter documenting removal, if approved.
- If a VP is observed but was not previously mapped, we will survey the VP following our normal full survey protocol.
- If a VP was previously mapped/surveyed (whether SVP or not) but not uploaded to IF&W data layer, we will field verify (spot check) the VP, including egg mass counts.
 - Maine SVP = meets state definition, has "significant" egg masses, etc.
 - Maine Non-SVP = meets state definition, doesn't have "significant" egg masses, etc.
 - Corps Priority Pool = In a wetland, not natural, has "significant" egg masses, etc.
 - Corps Pool = In a wetland, not natural, doesn't have "significant" egg masses, etc.
 - Spawning Area = Not in a wetland, not natural.

Exhibit B: Non-WOSS Data Form Examples

**Non-WOSS
Data Form Examples**

Segment 1

MREI

WETLAND SUMMARY FORM 2015

Observers: JPB

Date: 8/6/2015

Town: Beattie

Map: 1

Wetland ID: WET-1-7

(mile segment - wetland #)

Stream/Waterbody Name:

Corps Plot: Yes No X

Dominant NWI Class: PFO1E

Other NWI Classes: PSS

Tree

Betula allegheniensis

Acer rubrum

Fraxinus nigra

Representative Wetland Vegetation

S/S

Betula allegheniensis

Salix sp

Acer spicatum

Acer rubrum

Abies balsamea

Herb

Carex crinita

Impatiens capensis

Osmunda claytoniana

Solidago gigantea

Rubus hispidus

Glyceria canadensis

Representative Wetland Hydrology

X Surface Water

X High Water Table

X Saturated

(Approximate Depth 1")

(Approximate Depth 0)

(Approximate Depth 0)

Hydraulic Indicators:

Sediment Deposits

Water Stained Leaves

Water Marks

Drift Deposits

Thin Muck Surface

X Algal Mat or Crust

Hydrogen Sulfide Odor

Oxidized Rhizospheres on Living Roots

Other Observations:

Representative Wetland Soils

X Mineral

Organic

Depth	Horizon	Color	Redox Features	Texture
0-4"	A	10YR2/2	N/A	SL
4-9"	B	2.5Y6/1	10YR5/6	SL

Other Observations: Rock refusal at 9"

Meets Army Corps NE-NC regional Supplemental Criteria

X

Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, etc.)

Invasive Species:

Yes No X

Notes:

WOSS:

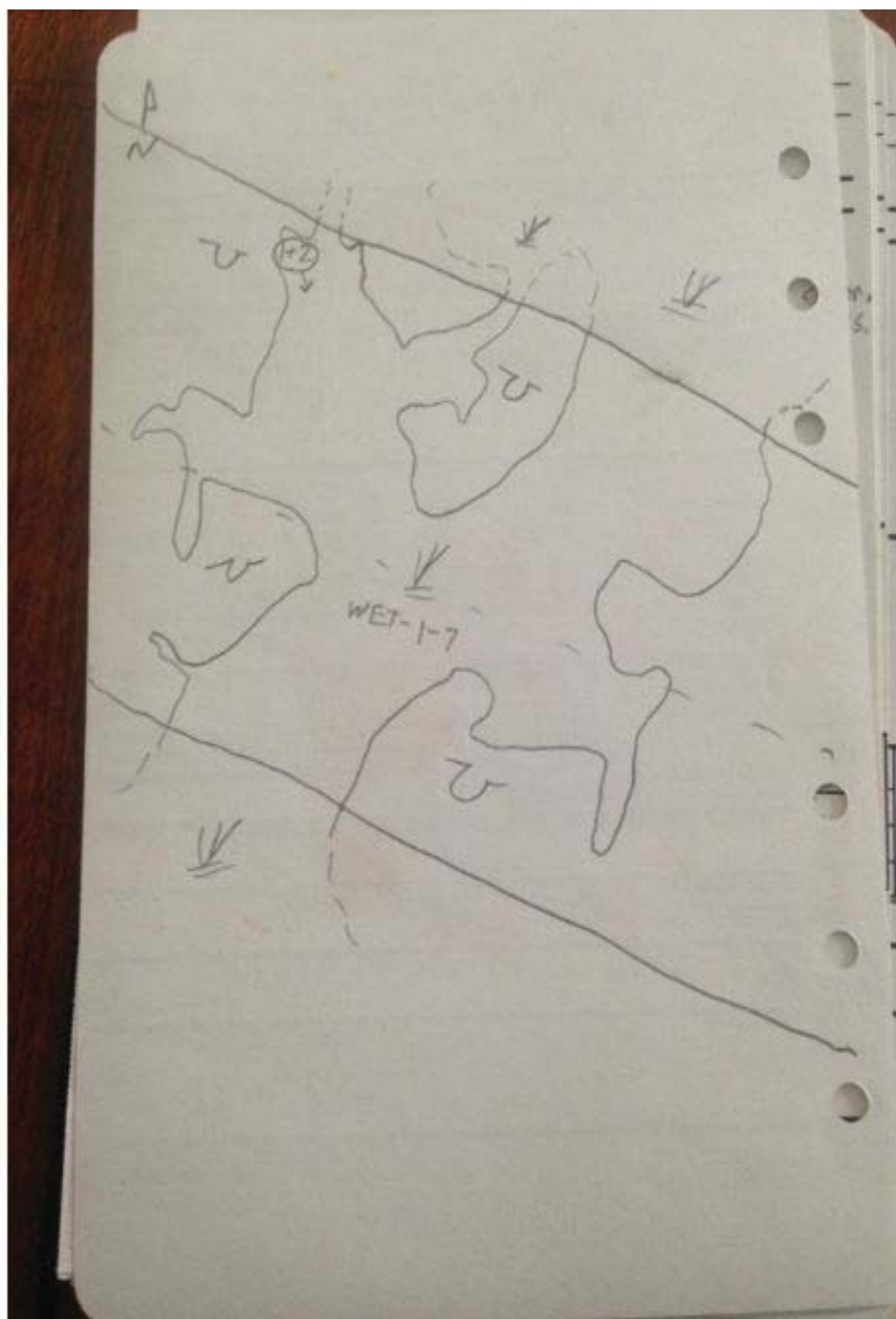
Yes No X

Type

General Notes:

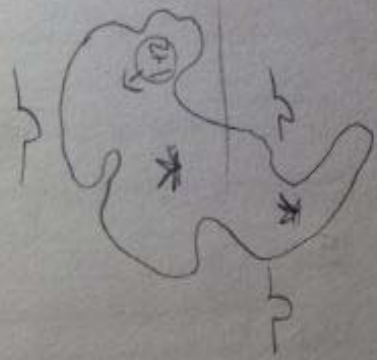
Photo # 2

SKETCH ON BACK



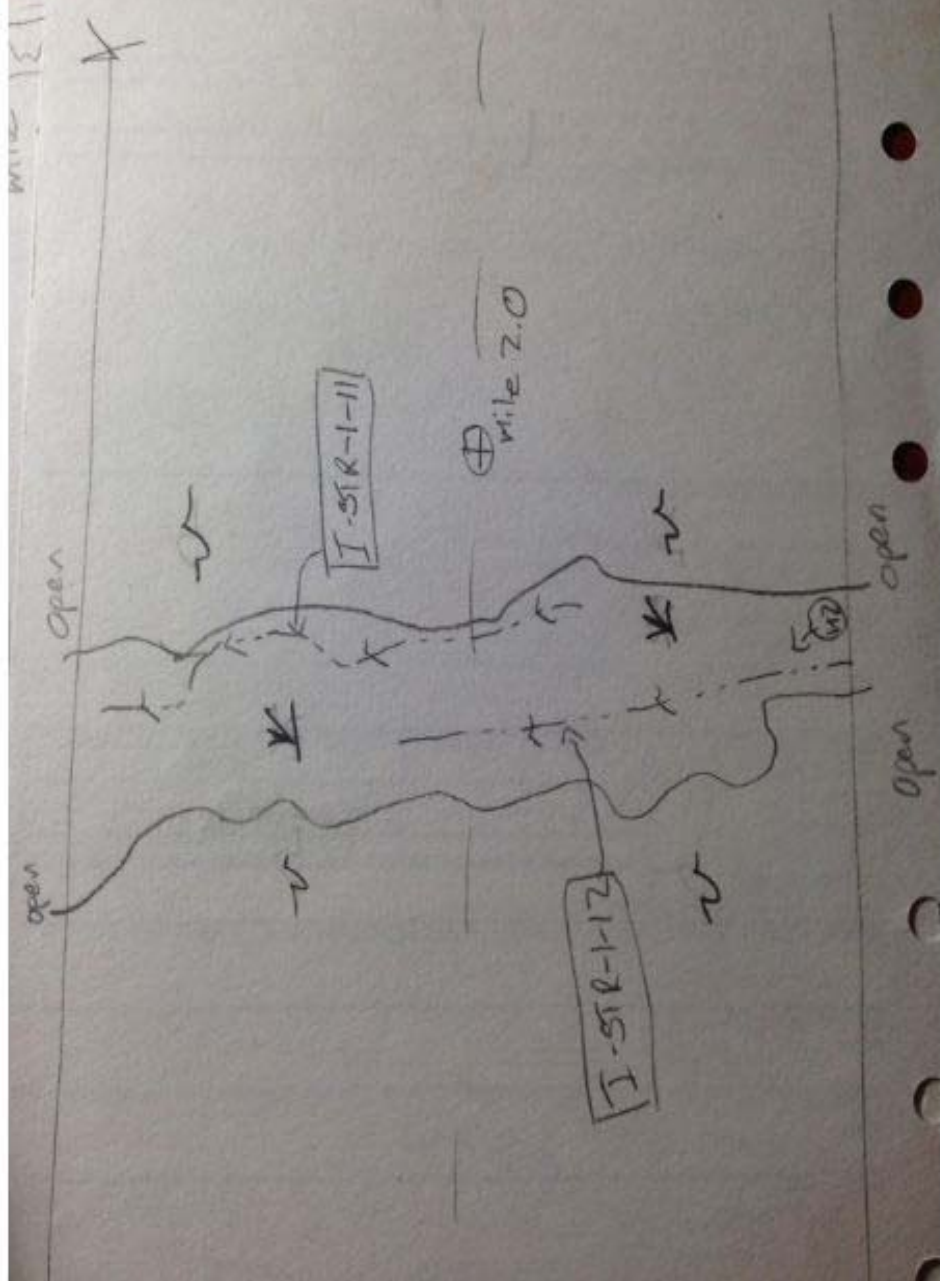
MREI WETLAND SUMMARY FORM 2015					
Observers: <u>SNH, LKH</u>		Date: <u>8/19/2015</u>			
Town: _____		Map: _____			
Wetland ID: <u>WET-1-15</u> (mile segment - wetland #)					
Stream/Waterbody Name: _____		Corps Plot: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X			
Dominant NWI Class: <u>PSSO1E</u>		Other NWI Classes: _____			
Representative Wetland Vegetation					
<u>Tree</u> Acer saccharinum	<u>S/S</u> Acer saccharinum	<u>Herb</u> Impatiens capensis			
Representative Wetland Hydrology					
<input type="checkbox"/> Surface Water (Approximate Depth)		<input type="checkbox"/> High Water Table (Approximate Depth)		<input checked="" type="checkbox"/> Saturated (Approximate Depth)	
Hydraulic Indicators:		<input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Water Stained Leaves <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Deposits <input checked="" type="checkbox"/> Thin Muck Surface <input checked="" type="checkbox"/> Algal Mat or Crust <input type="checkbox"/> Hydrogen Sulfide Odor <input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots			
Other Observations: _____					
Representative Wetland Soils <input checked="" type="checkbox"/> Mineral <input type="checkbox"/> Organic		Depth 5-0" 0-9"	Horizon O A	Color Black 10YR5/2	Redox Features N/A 5YR4/6
Other Observations: Rock refusal at 9"					
Meets Army Corps NE-NC regional Supplemental Criteria <input checked="" type="checkbox"/> X					
Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, etc.) Moose and bear sign					
Invasive Species: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X					
Notes: _____					
WOSS: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X					
Type _____					
General Notes: Series of small plateaus on steep slope. Acer sacc growing on small upland areas within.					
Photo # <u>2</u> SKETCH ON BACK					

WET-1-15



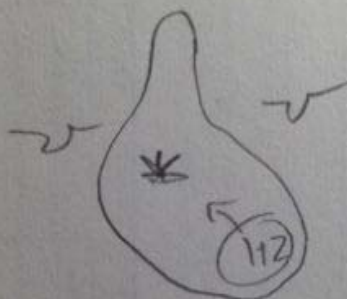
MREI WETLAND SUMMARY FORM 2015					
Observers: <u>SNH, LKH</u>		Date: <u>8/19/2015</u>			
Town: _____		Map: _____			
Wetland ID: <u>WET-1-19</u> (mile segment - wetland #)					
Stream/Waterbody Name: _____		Corps Plot: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Dominant NWI Class: <u>PEM01E</u> Other NWI Classes: _____					
Representative Wetland Vegetation					
<u>Tree</u> Acer saccharinum Abies balsamea	<u>S/S</u> Acer saccharinum	<u>Herb</u> Glyceria striatum Impatiens capensis			
Representative Wetland Hydrology					
<input type="checkbox"/> Surface Water (Approximate Depth)		<input checked="" type="checkbox"/> High Water Table (Approximate Depth)		<input checked="" type="checkbox"/> Saturated (Approximate Depth)	
Hydraulic Indicators:		<input checked="" type="checkbox"/> Sediment Deposits		<input checked="" type="checkbox"/> Water Stained Leaves	
<input type="checkbox"/> Water Marks		<input type="checkbox"/> Drift Deposits		<input checked="" type="checkbox"/> Thin Muck Surface	
<input checked="" type="checkbox"/> Algal Mat or Crust		<input type="checkbox"/> Hydrogen Sulfide Odor		<input type="checkbox"/> Oxidized Rhizospheres on Living Roots	
Other Observations: _____					
Representative Wetland Soils <input type="checkbox"/> Mineral <input checked="" type="checkbox"/> Organic	Depth 6-0" 0-0.5"	Horizon O A	Color Black 10YR6/1	Redox Features N/A 7.5YR5/7	Texture Hemic S
Other Observations: _____					
Meets Army Corps NE-NC regional Supplemental Criteria <input checked="" type="checkbox"/>					
Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, etc.) Moose and bear sign					
Invasive Species: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
Notes: Colts foot					
WOSS: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
Type Stream adjacency					
General Notes: I-STR-1-11 and I-STR-1-12 runs through it. Contains several areas with upaldn veg. on drained hydric soil. Likely equipment trails led to drainage.. Not flagged as up islands.					
Photo # <u>2</u> SKETCH ON BACK					

WET-2-19



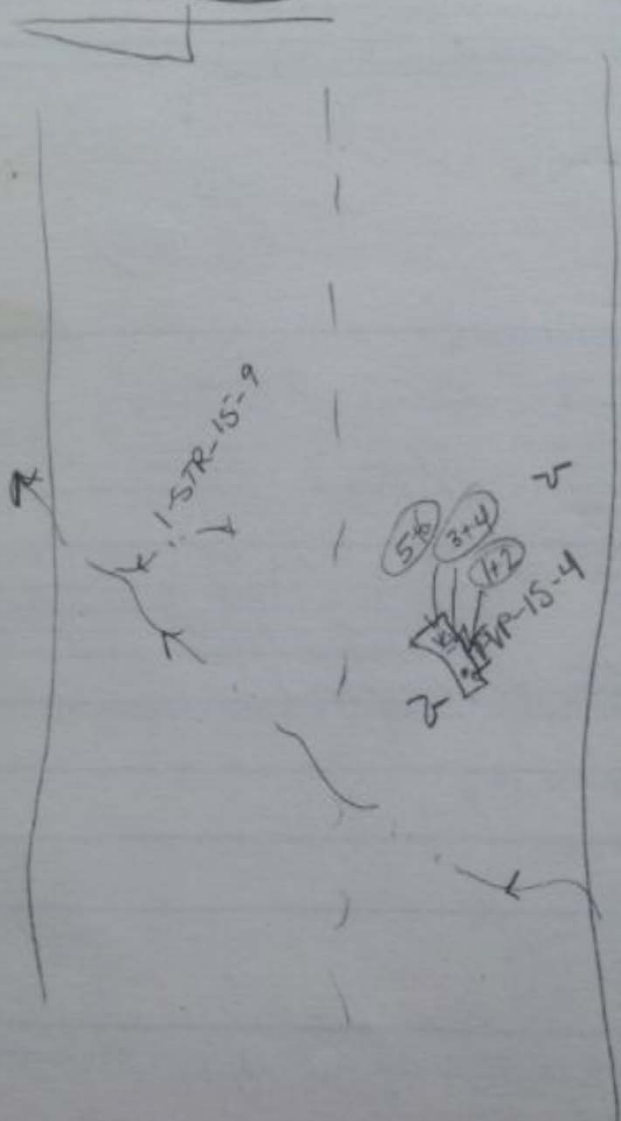
MREI WETLAND SUMMARY FORM 2015					
Observers: <u>SNH, LKH</u>		Date: <u>8/18/2015</u>			
Town: _____		Map: _____			
Wetland ID: <u>WET-2-19</u> (mile segment - wetland #)					
Stream/Waterbody Name: _____		Corps Plot: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X <input type="checkbox"/>			
Dominant NWI Class: <u>PEM01E</u>		Other NWI Classes: <u>PFO1E</u>			
Representative Wetland Vegetation					
<u>Tree</u> Acer saccharinum Abies balsamea	<u>S/S</u> Viburnum lantanoides	<u>Herb</u> Impatiens capensis Dryopteris carthusiana			
Representative Wetland Hydrology					
<input type="checkbox"/> Surface Water		<input checked="" type="checkbox"/> High Water Table		<input checked="" type="checkbox"/> Saturated	
(Approximate Depth _____)		(Approximate Depth _____)		(Approximate Depth _____)	
Hydraulic Indicators:					
<input type="checkbox"/> Water Marks	<input type="checkbox"/> Sediment Deposits	<input checked="" type="checkbox"/> Water Stained Leaves			
<input type="checkbox"/> Algal Mat or Crust	<input type="checkbox"/> Drift Deposits	<input type="checkbox"/> Thin Muck Surface			
	<input type="checkbox"/> Hydrogen Sulfide Odor	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots			
Other Observations: _____					
Representative Wetland Soils <input type="checkbox"/> Mineral <input checked="" type="checkbox"/> Organic		Depth 0-6"	Horizon A	Color Black	Redox Features N/A
		Texture Fibric			
Other Observations: _____					
Meets Army Corps NE-NC regional Supplemental Criteria <input checked="" type="checkbox"/> X <input type="checkbox"/>					
Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, etc.)					
Moose sign					
Invasive Species: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X <input type="checkbox"/>					
Notes: _____					
WOSS: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X <input type="checkbox"/>					
Type _____					
General Notes:					
Photo # <u>2</u>		SKETCH ON BACK			

WET-2-19



MREI WETLAND SUMMARY FORM 2015																					
Observers: <u>HSW, LKH, SNH</u>	Date: <u>7/15/2015</u>																				
Town: <u>Appleton</u>	Map: <u>15</u>																				
Wetland ID: <u>WET-15-4</u> (mile segment - wetland #)																					
Stream/Waterbody Name: <u> </u>	Corps Plot: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X																				
Dominant NWI Class: <u>PUB</u> Other NWI Classes: <u> </u>																					
Representative Wetland Vegetation																					
<u>Tree</u> Abies balsamea	<u>S/S</u>	<u>Herb</u>																			
Representative Wetland Hydrology																					
<input checked="" type="checkbox"/> Surface Water <input checked="" type="checkbox"/> High Water Table <input checked="" type="checkbox"/> Saturated (Approximate Depth 0-2") (Approximate Depth Surface) (Approximate Depth Surface)																					
Hydraulic Indicators: <input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Water Stained Leaves <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Deposits <input type="checkbox"/> Thin Muck Surface <input type="checkbox"/> Algal Mat or Crust <input checked="" type="checkbox"/> Hydrogen Sulfide Odor <input type="checkbox"/> Oxidized Rhizospheres on Living Roots																					
Other Observations: <u> </u>																					
Representative Wetland Soils <input checked="" type="checkbox"/> Mineral <input type="checkbox"/> Organic	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 15%;">Depth</th> <th style="width: 15%;">Horizon</th> <th style="width: 15%;">Color</th> <th style="width: 15%;">Redox Features</th> <th style="width: 15%;">Texture</th> </tr> </thead> <tbody> <tr> <td>4-0"</td> <td>O</td> <td>Black</td> <td>N/A</td> <td>Org</td> </tr> <tr> <td>0-4"</td> <td>B</td> <td>2.5Y4/2</td> <td>N/A</td> <td>LS</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Depth	Horizon	Color	Redox Features	Texture	4-0"	O	Black	N/A	Org	0-4"	B	2.5Y4/2	N/A	LS					
Depth	Horizon	Color	Redox Features	Texture																	
4-0"	O	Black	N/A	Org																	
0-4"	B	2.5Y4/2	N/A	LS																	
Other Observations: <u>Rock refusal at 8"</u>																					
Meets Army Corps NE-NC regional Supplemental Criteria <input checked="" type="checkbox"/> X																					
Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, etc.) <u> </u>																					
Invasive Species: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X																					
Notes: <u> </u>																					
WOSS: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X Type Unknown -PVP																					
General Notes: PVP-15-4 Very little vegetation																					
Photo # 3+4 facing PUB, 5 wetland drain 1+2 PVP-15-4 <div style="float: right; text-align: right;"> SKETCH ON BACK </div>																					

WET-15-4
PVP-15-4



Date: 7/9/14	Project Name: Kan Gorge
Job #: 488	Cowardin Class(es) & %: PFOIE
Observers: HSN JPM	Photo(s) #:
Comments: morph. adaptations - buttressed roots	

Dominant Vegetation (by stratum):

Herbs	Herbs (cont.)	Shrubs/Saplings	Trees	Vines
rub hys		bet all	pop trem	N/A
cin fern		pic rub	bet all	
wild currant		ace. pen		
lady fern		abi. bal		
star flower				

Wetland Hydrology Indicators:

☐ Perm. Flooded (approx. depth:)
 ☒ Seasonally Flooded/Saturated (approx. depth:)
 ☒ Saturated

*A1 - Surface water	*B5 - Iron deposits	*B15 - Marl deposits	*C7 - Thin muck surface
*A2 - High water table	B6 - Surface soil cracks	B16 - Moss trim lines	C8 - Crayfish burrows
*A3 - Saturation	*B7 - Inundated aerial imagery	*C1 - Hydrogen sulfide odor	C9 - Saturation visible on aerial imagery
*B1 - Water marks	*B8 - Sparse veg. concave surface	C2 - Dry-season water table	*D1 - Stunted or stressed plants
*B2 - Sediment deposits	*B9 - Water-stained leaves	*C3 - Oxidized rhizospheres - living root	*D2 - Geomorphic position
*B3 - Drift deposits	B10 - Drainage patterns	*C4 - Presence of reduced iron	*D3 - Shallow aquitard
*B4 - Algal mat or crust	*B13 - Aquatic fauna	*C6 - Recent iron reduction in tilled soils	*D4 - Microtopographic relief
*Denotes Primary Indicator			*D5-FAC-neutral test

Representative Hydric Soils:

Depth (in)	Horizon	Texture	Color	Redox. Features	Other
0-1	1	loam	2.5 B/1	N/A	
1-4	2	loam	5Y 3/2		
4-8	3	sil	5Y 5/2		

Hydric Soil Indicator & Reference:

Other Soil Comments:

Functions & Values: place an * next to primary f&v & circle all that apply

- ☐ Groundwater Recharge/Discharge
 ☐ Floodwater Alteration
 ☐ Fish & Shellfish Habitat
 ☐ Sed./Tox./Pathogen Retention
 ☐ Nutrient R/R/T
 ☐ Production Export
 ☐ Sediment/Shoreline Stabilization
 ☐ Wildlife Habitat
 ☐ Recreation
 ☐ Educational/Scientific Value
 ☐ Uniqueness/Heritage
 ☐ Visual Quality/Aesthetics
 ☐ RTE Habitat

GPS Tech: JFM

GPS File: 488KG SMG 07092014

Stream Data:

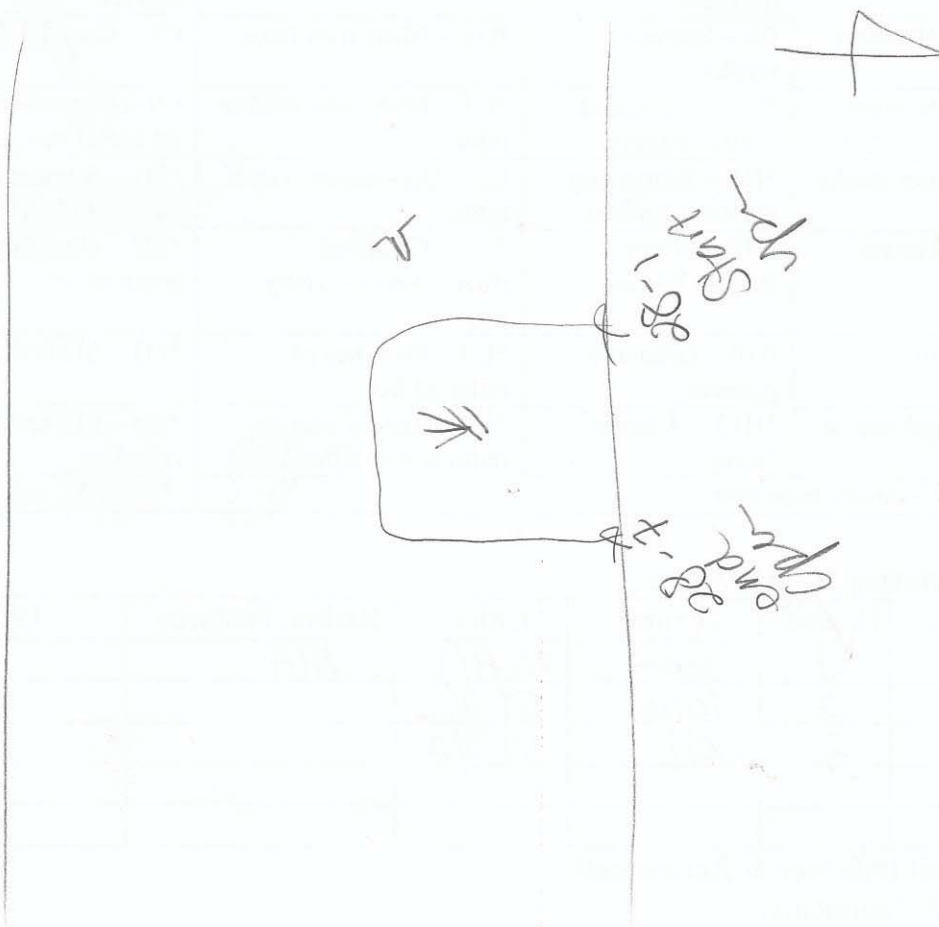
Stream Name: _____ Wetland: ☐ no wetland ☐ wetland: _____
Max Width: _____ Max Depth: _____ Per: _____ Int: _____
Bank Type: ☐ vertical ☐ gradual ☐ undercut ☐ other: _____
Substrate (>30%): ☐ mud ☐ gravel ☐ sand ☐ bedrock ☐ peat/muck

Stream Name: _____ Wetland: ☐ no wetland ☐ wetland: _____
Max Width: _____ Max Depth: _____ Per: _____ Int: _____
Bank Type: ☐ vertical ☐ gradual ☐ undercut ☐ other: _____
Substrate (>30%): ☐ mud ☐ gravel ☐ sand ☐ bedrock ☐ peat/muck

Notes:

SKETCH: wetland (&) stream ID: _____

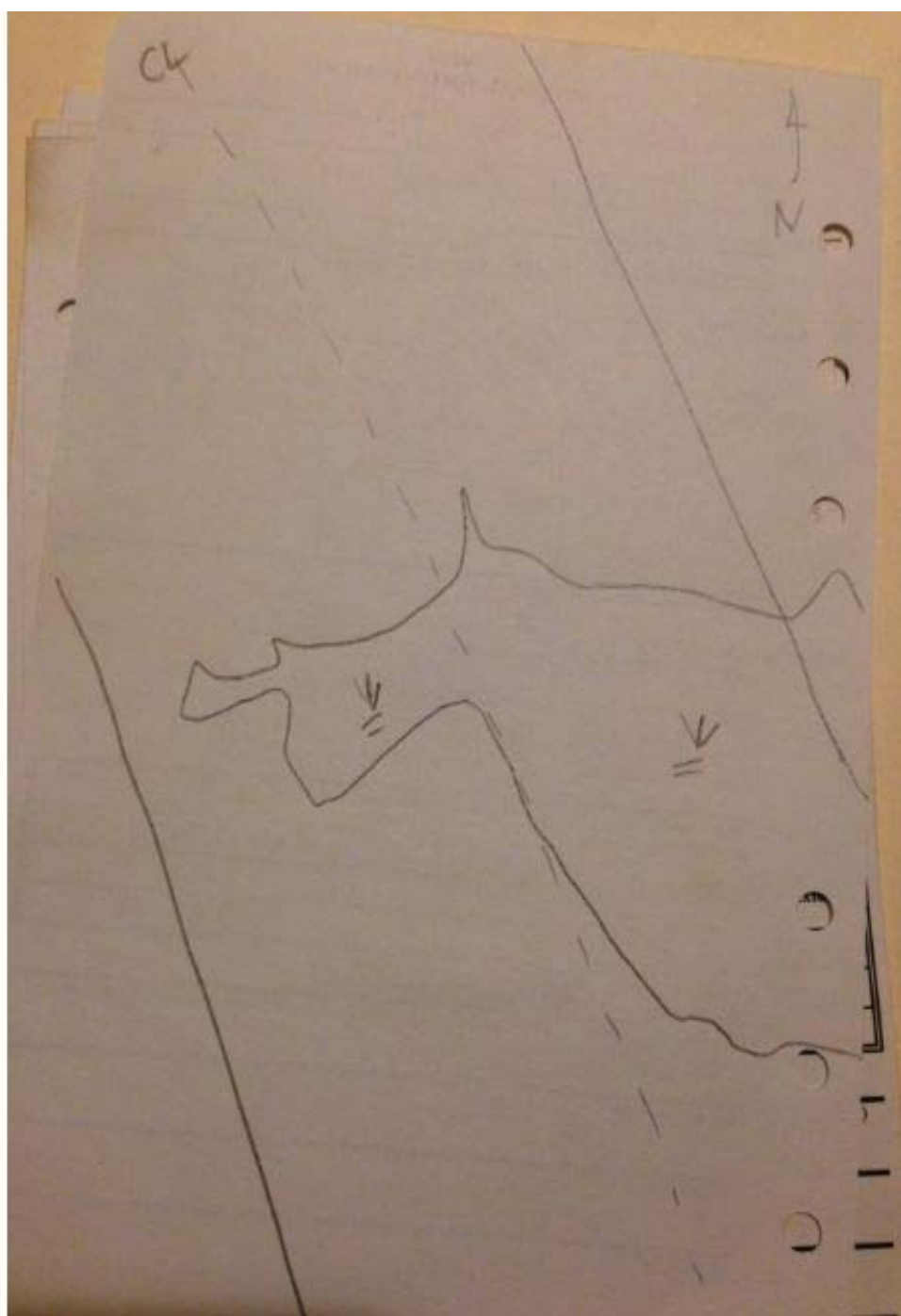
(include: North Arrow, Photo # and Location/Direction, Landmarks, Flag locations)



**Non-WOSS
Data Form Examples**

Segment 2

MREI WETLAND SUMMARY FORM 2015					
Observers: <u>JPB</u>		Date: <u>8/17/2015</u>			
Town: <u>West Forks</u>		Map: _____			
Wetland ID: <u>WET-55-2</u> (mile segment - wetland #)					
Stream/Waterbody Name: _____		Corps Plot: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X			
Dominant NWI Class: <u>POW</u>		Other NWI Classes: <u>PFO1/4E</u>			
Representative Wetland Vegetation					
<u>Tree</u> Thuja occidentalis Abies balsamea Betula alleghaniensis Acer rubrum	<u>S/S</u> Abies balsamea Acer rubrum Spiraea tomentosa Rhododendron groenlandicum Chamaedaphne calyculata	<u>Herb</u> Thuja occidentalis Chamaedaphne calyculata Onoclea sensibilis Equisetum sp Phalaris arundinacea			
Representative Wetland Hydrology					
<input checked="" type="checkbox"/> Surface Water (Approximate Depth 0-10")		<input checked="" type="checkbox"/> High Water Table (Approximate Depth 0)		<input checked="" type="checkbox"/> Saturated (Approximate Depth 0)	
Hydraulic Indicators: <input type="checkbox"/> Water Marks <input type="checkbox"/> Algal Mat or Crust		<input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drift Deposits <input type="checkbox"/> Hydrogen Sulfide Odor		<input checked="" type="checkbox"/> Water Stained Leaves <input type="checkbox"/> Thin Muck Surface <input type="checkbox"/> Oxidized Rhizospheres on Living Roots	
Other Observations: Drainage patterns					
Representative Wetland Soils <input checked="" type="checkbox"/> Mineral <input type="checkbox"/> Organic		Depth 0-6"	Horizon A	Color 10YR5/1	Redox Features 7.5YR5/4
		CL			
Other Observations: Rock refusal at 6"					
Meets Army Corps NE-NC regional Supplemental Criteria <input checked="" type="checkbox"/> X					
Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, etc.)					
Invasive Species: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X					
Notes:					
WOSS: Yes <input checked="" type="checkbox"/> X No <input type="checkbox"/>					
Type					
General Notes:					
Photo # <u>2</u>		SKETCH ON BACK			



MREI WETLAND SUMMARY FORM 2015																									
Observers: <u>JPB</u>		Date: <u>8/25/2015</u>																							
Town: _____		Map: _____																							
Wetland ID: <u>WET-57-1</u> (mile segment - wetland #)																									
Stream/Waterbody Name: _____		Corps Plot: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																							
Dominant NWI Class: <u>PFO1/4E</u> Other NWI Classes: <u>PSS, PEM</u>																									
Representative Wetland Vegetation																									
<u>Tree</u> Abies balsamea Betula alleghaniensis Thuja occidentalis Fraxinus nigra	<u>S/S</u> Alnus incana Cornus sp Abies balsamea	<u>Herb</u> Phalaris arundinacea Impatiens capensis Onoclea sensibilis																							
Representative Wetland Hydrology																									
<input checked="" type="checkbox"/> Surface Water (Approximate Depth 2")		<input checked="" type="checkbox"/> High Water Table (Approximate Depth 5")		<input checked="" type="checkbox"/> Saturated (Approximate Depth 0)																					
Hydraulic Indicators:		<input checked="" type="checkbox"/> Sediment Deposits		<input checked="" type="checkbox"/> Water Stained Leaves																					
<input type="checkbox"/> Water Marks		<input type="checkbox"/> Drift Deposits		<input type="checkbox"/> Thin Muck Surface																					
<input type="checkbox"/> Algal Mat or Crust		<input type="checkbox"/> Hydrogen Sulfide Odor		<input type="checkbox"/> Oxidized Rhizospheres on Living Roots																					
Other Observations: _____																									
Representative Wetland Soils <input checked="" type="checkbox"/> Mineral <input type="checkbox"/> Organic	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Depth</th> <th style="text-align: center;">Horizon</th> <th style="text-align: center;">Color</th> <th style="text-align: center;">Redox Features</th> <th style="text-align: center;">Texture</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">0-4"</td> <td style="text-align: center;">A</td> <td style="text-align: center;">10YR2/1</td> <td style="text-align: center;">N/A</td> <td style="text-align: center;">MuSiL</td> </tr> <tr> <td style="height: 20px;"></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="height: 20px;"></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Depth	Horizon	Color	Redox Features	Texture	0-4"	A	10YR2/1	N/A	MuSiL											Other Observations: Rock refusal at 4". Mucky modifier.			
Depth	Horizon	Color	Redox Features	Texture																					
0-4"	A	10YR2/1	N/A	MuSiL																					
Meets Army Corps NE-NC regional Supplemental Criteria <input checked="" type="checkbox"/>																									
Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, etc.)																									
Wildlife trail																									
Invasive Species: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																									
Notes:																									
WOSS: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																									
Type Adjacent to stream																									
General Notes:																									
Contains P-STR-57-1 and I-STR-57-2																									
Photo # <u>2</u>		SKETCH ON BACK																							

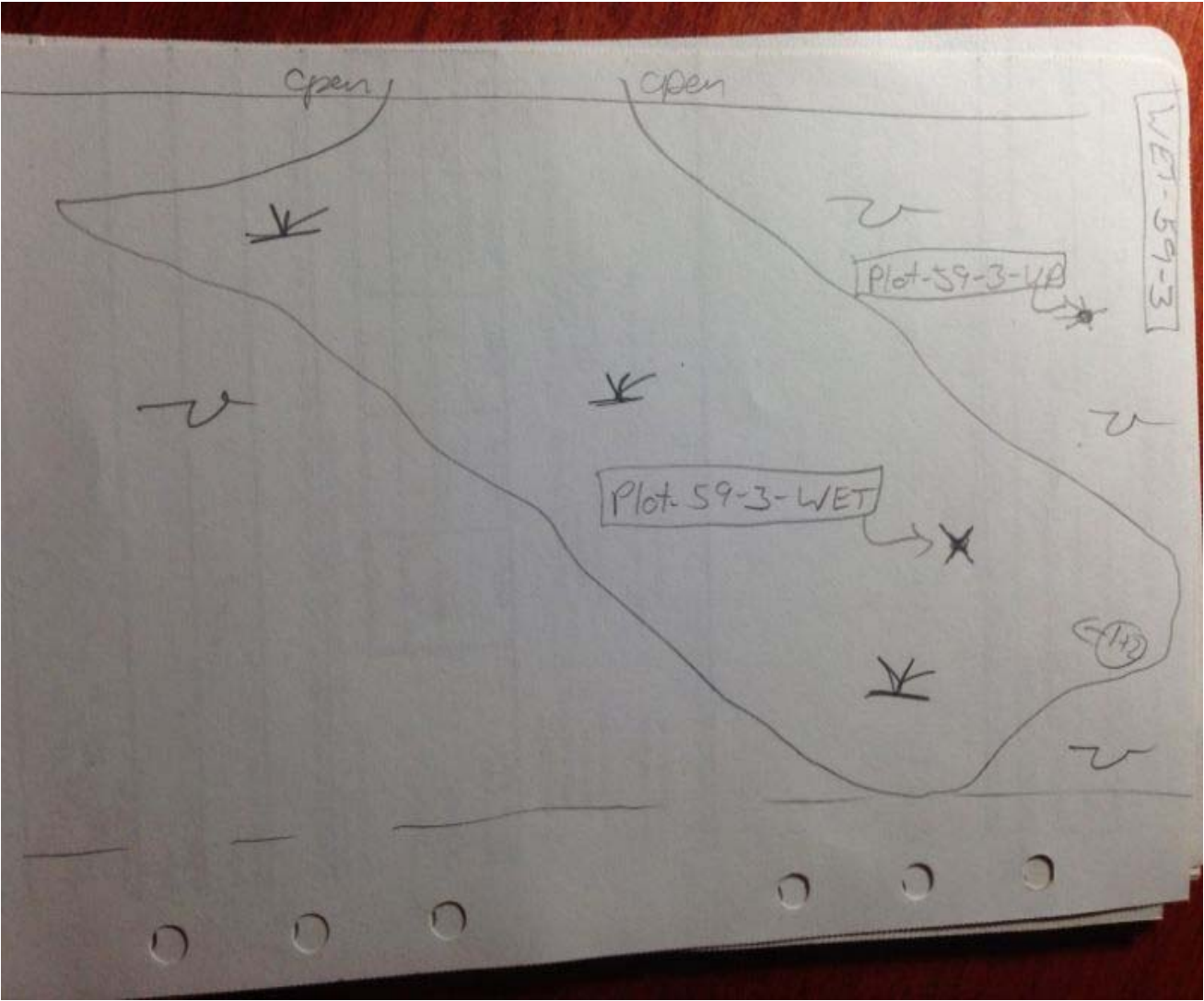
MREI WETLAND SUMMARY FORM 2015					
Observers: <u>SNH, LKH</u>		Date: <u>8/27/2015</u>			
Town: _____		Map: <u>53</u>			
Wetland ID: <u>WET-59-3</u> (mile segment - wetland #)					
Stream/Waterbody Name: _____		Corps Plot: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
Dominant NWI Class: <u>PEM01E</u>		Other NWI Classes: <u>PFO4E</u>			
Representative Wetland Vegetation					
<u>Tree</u> Picea rubens	<u>S/S</u> Picea rubens	<u>Herb</u> Phalaris arundinacea Osmundastrum cinnamomeum			
Representative Wetland Hydrology					
<input checked="" type="checkbox"/> Surface Water		<input type="checkbox"/> High Water Table		<input checked="" type="checkbox"/> Saturated	
(Approximate Depth _____)		(Approximate Depth _____)		(Approximate Depth _____)	
Hydraulic Indicators:					
<input type="checkbox"/> Water Marks	<input type="checkbox"/> Sediment Deposits	<input checked="" type="checkbox"/> Water Stained Leaves			
<input type="checkbox"/> Algal Mat or Crust	<input type="checkbox"/> Drift Deposits	<input type="checkbox"/> Thin Muck Surface			
	<input type="checkbox"/> Hydrogen Sulfide Odor	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots			
Other Observations: _____					
Representative Wetland Soils					
<input checked="" type="checkbox"/> Mineral <input type="checkbox"/> Organic		Depth	Horizon	Color	Redox Features
		0-4"	A	Gley1 4/10Y	7.5YR5/6
Other Observations: Rock refusal at 4"					
Meets Army Corps NE-NC regional Supplemental Criteria <input checked="" type="checkbox"/>					
Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, etc.)					
Invasive Species: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
Notes: Phalaris					
WOSS: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>					
Type					
General Notes:					
Wetland enters forested area and ends open on downhill side (E) of cleared corridor					
Photo # <u>2</u> SKETCH ON BACK					

WET-59-3

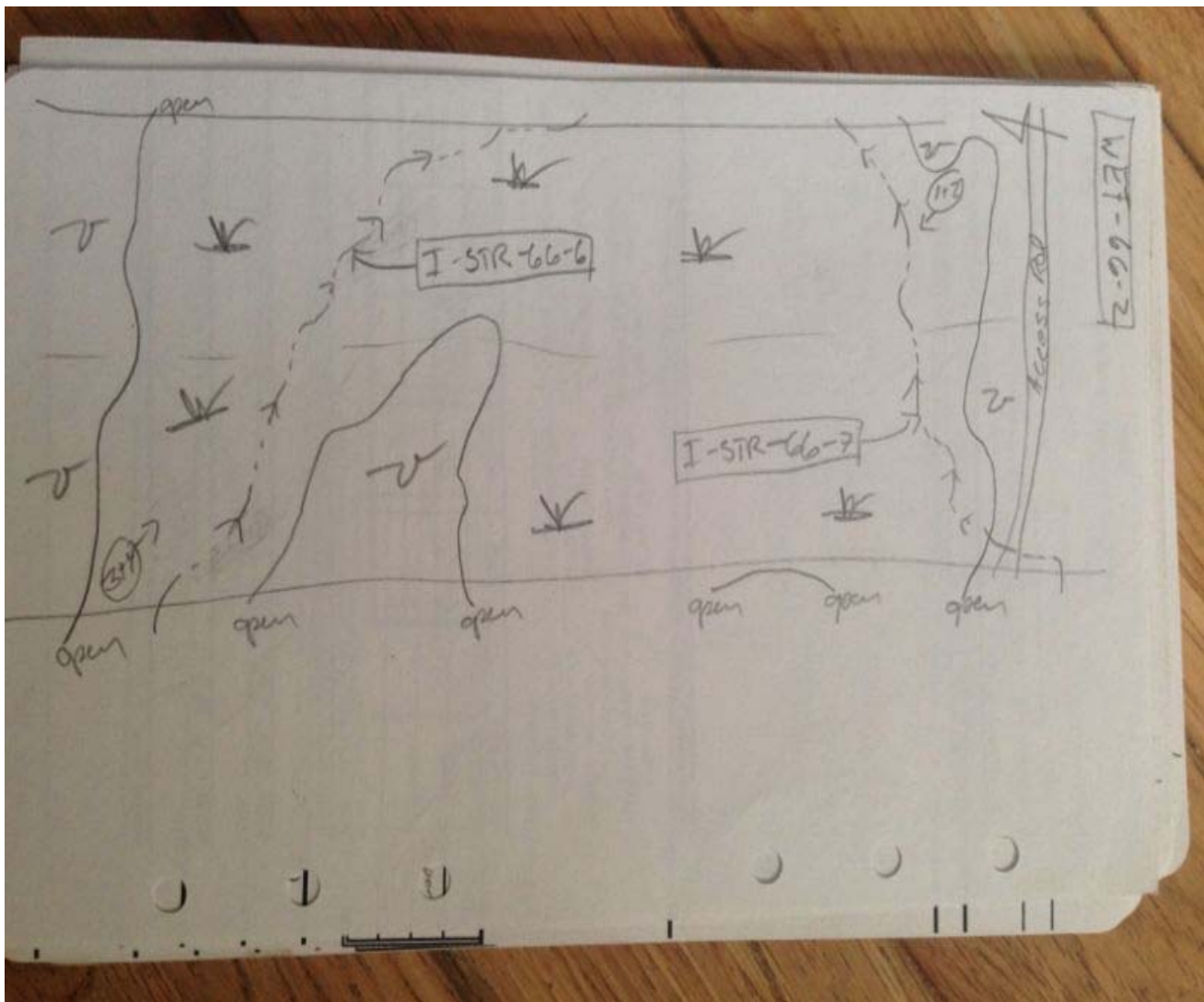
Plot-59-3-1A

Plot-59-3-WET

(142)



MREI WETLAND SUMMARY FORM 2015																									
Observers: <u>SNH, LKH</u>		Date: <u>9/25/2015</u>																							
Town: _____		Map: _____																							
Wetland ID: <u>WET-66-2</u> (mile segment - wetland #)																									
Stream/Waterbody Name: _____		Corps Plot: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X																							
Dominant NWI Class: <u>PSS1E</u>		Other NWI Classes: <u>PF1E</u>																							
Representative Wetland Vegetation																									
<u>Tree</u> Thuja occidentalis Abies balsamea	<u>S/S</u> Thuja occidentalis Sirea alba Albus incana	<u>Herb</u> Phalaris arundinacea Juncus effusus Agrostis gigantea																							
Representative Wetland Hydrology																									
<input type="checkbox"/> Surface Water (Approximate Depth)		<input type="checkbox"/> High Water Table (Approximate Depth)		<input checked="" type="checkbox"/> Saturated (Approximate Depth)																					
Hydraulic Indicators:		<input type="checkbox"/> Sediment Deposits <input checked="" type="checkbox"/> Water Stained Leaves <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Deposits <input checked="" type="checkbox"/> Thin Muck Surface <input checked="" type="checkbox"/> Algal Mat or Crust <input type="checkbox"/> Hydrogen Sulfide Odor <input type="checkbox"/> Oxidized Rhizospheres on Living Roots																							
Other Observations:																									
Representative Wetland Soils <input type="checkbox"/> Mineral <input checked="" type="checkbox"/> O Organic	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Depth</th> <th>Horizon</th> <th>Color</th> <th>Redox Features</th> <th>Texture</th> </tr> </thead> <tbody> <tr> <td>0-8"</td> <td>O</td> <td>10YR2/2</td> <td>N/A</td> <td>Sap</td> </tr> <tr> <td>RR</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Depth	Horizon	Color	Redox Features	Texture	0-8"	O	10YR2/2	N/A	Sap	RR													
Depth	Horizon	Color	Redox Features	Texture																					
0-8"	O	10YR2/2	N/A	Sap																					
RR																									
Other Observations:																									
Meets Army Corps NE-NC regional Supplemental Criteria <input checked="" type="checkbox"/> X																									
Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, etc.)																									
Invasive Species: Yes <input checked="" type="checkbox"/> X No <input type="checkbox"/>																									
Notes: Phalaris																									
WOSS: Yes <input checked="" type="checkbox"/> X No <input type="checkbox"/>																									
Type Stream adj																									
General Notes:																									
Photo # <u>4</u>		SKETCH ON BACK																							



**Non-WOSS
Data Form Examples**

Segment 3

BOYLE
ASSOCIATES

Routine Wetland Field Data Form WET-75-06

Date: <u>5.21.17</u>	Project Name: <u>QMI</u>
Job #: <u>532</u>	Cowardin Class(es) & %: <u>PUB/SSIE</u>
Observers: <u>HSW CJF</u>	Photo(s) #:
Comments:	

Dominant Vegetation (by stratum):

Herbs	Herbs (cont.)	Shrubs/Saplings	Trees	Vines
<u>Carex sp.</u>		<u>Sp. lat</u>		
		<u>aln inc</u>		

Wetland Hydrology Indicators:

☐ Perm. Flooded
 ☒ Seasonally Flooded
 ☐ Saturated

(approx. depth: 5')
 (approx. depth: 5')

*A1 - Surface water	*B5 - Iron deposits	*B15 - Marl deposits	*C7 - Thin muck surface
*A2 - High water table	B6 - Surface soil cracks	B16 - Moss trim lines	C8 - Crayfish burrows
*A3 - Saturation	*B7 - Inundated aerial imagery	*C1 - Hydrogen sulfide odor	C9 - Saturation visible on aerial imagery
*B1 - Water marks	*B8 - Sparse veg. concave surface	C2 - Dry-season water table	*D1 - Stunted or stressed plants
*B2 - Sediment deposits	*B9 - Water-stained leaves	*C3 - Oxidized rhizospheres - living root	*D2 - Geomorphic position
*B3 - Drift deposits	B10 - Drainage patterns	*C4 - Presence of reduced iron	*D3 - Shallow aquitard
*B4 - Algal mat or crust	*B13 - Aquatic fauna	*C6 - Recent iron reduction in tilled soils	*D4 - Microtopographic relief
*Denotes Primary Indicator			*D5-FAC-neutral test

Representative Hydric Soils:

Depth (in)	Horizon	Texture	Color	Redox. Features	Other
<u>0-1</u>	<u>1</u>	<u>loam</u>	<u>10YR 4/2</u>		
<u>1-4</u>	<u>2</u>	<u>Sil</u>	<u>2.5Y 3/2</u>		
<u>6-10</u>	<u>3</u>	<u>Sil</u>	<u>2.5Y 4/2</u>	<u>10YR 4/5</u>	

Hydric Soil Indicator & Reference:

Other Soil Comments: A12

Functions & Values: place an * next to primary f&v & circle all that apply
☒ Groundwater Recharge/Discharge ☒ Floodwater Alteration ☒ Fish & Shellfish Habitat
☒ Sed./Tox./Pathogen Retention ☒ Nutrient R/R/T ☒ Production Export
☒ Sediment/Shoreline Stabilization ☒ Wildlife Habitat ☒ Recreation
☒ Educational/Scientific Value ☒ Uniqueness/Heritage ☒ Visual Quality/Aesthetics
☒ RTE Habitat

GPS Tech: CJF

GPS File:

Stream Data:

Stream Name: _____ Wetland: no wetland

wetland: _____

Max Width: _____ Max Depth: _____ Per: _____ Int: _____

Bank Type: vertical gradual undercut other: _____

Substrate (>30%): mud gravel sand bedrock

peat/muck

Stream Name: _____ Wetland: no wetland

wetland: _____

Max Width: _____ Max Depth: _____ Per: _____ Int: _____

Bank Type: vertical gradual undercut other: _____

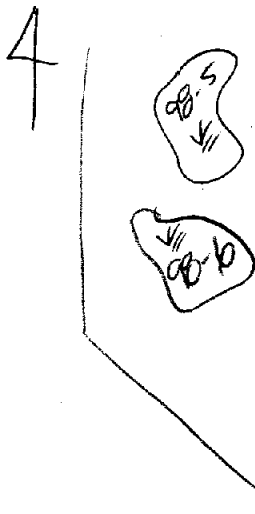
Substrate (>30%): mud gravel sand bedrock

peat/muck

Notes:

SKETCH: wetland (&) stream ID: _____

(include: North Arrow, Photo # and Location/Direction, Landmarks, Flag locations)



Date: 5.23.17	Project Name: QM1
Job #: 532	Cowardin Class(es) & %: PFOIE/PUB
Observers: HSW CTF	Photo(s) #:
Comments: VP. Area appears to be recently flooded due to either beaver impoundment or other	

Dominant Vegetation (by stratum):

Herbs	Herbs (cont.)	Shrubs/Saplings	Trees	Vines
Ø	Ø	cor ser aln inc abi bal	ace rub	Ø

Wetland Hydrology Indicators:

Perm. Flooded (approx. depth:)	<input checked="" type="checkbox"/> Seasonally Flooded (approx. depth: 5')	<input type="checkbox"/> Saturated	
*A1 - Surface water	*B5 - Iron deposits	*B15 - Marl deposits	*C7 - Thin muck surface
*A2 - High water table	B6 - Surface soil cracks	B16 - Moss trim lines	C8 - Crayfish burrows
*A3 - Saturation	*B7 - Inundated aerial imagery	*C1 - Hydrogen sulfide odor	C9 - Saturation visible on aerial imagery
*B1 - Water marks	*B8 - Sparse veg. concave surface	C2 - Dry-season water table	*D1 - Stunted or stressed plants
*B2 - Sediment deposits	*B9 - Water-stained leaves	*C3 - Oxidized rhizospheres - living root	*D2 - Geomorphic position
*B3 - Drift deposits	B10 - Drainage patterns	*C4 - Presence of reduced iron	*D3 - Shallow aquitard
*B4 - Algal mat or crust	*B13 - Aquatic fauna	*C6 - Recent iron reduction in tilled soils	*D4 - Microtopographic relief
*Denotes Primary Indicator			*D5-FAC-neutral test

Representative Hydric Soils:

Depth (in)	Horizon	Texture	Color	Redox. Features	Other
0-4	1	SL	10YR 3/2	—	—
4-8	2	LS	2.5YR 4/2	2.5Y 5/1	—

Hydric Soil Indicator & Reference:

Other Soil Comments:

Fb - broaden area could
use NEHSI (New Eng) I, Ponded or Flooded
Soils.

Functions & Values: place an * next to primary f&v & circle all that apply

☒ Groundwater Recharge/Discharge
 ☒ Floodwater Alteration
 ☐ Fish & Shellfish Habitat
 ☒ Sed./Tox./Pathogen Retention
 ☒ Nutrient R/R/T
 ☐ Production Export
 ☒ Sediment/Shoreline Stabilization
 ☒ Wildlife Habitat
 ☐ Recreation
 ☐ Educational/Scientific Value
 ☐ Uniqueness/Heritage
 ☐ Visual Quality/Aesthetics
 ☐ RTE Habitat

GPS Tech: CJF

GPS File: _____

Stream Data:

Stream Name: _____ Wetland: no wetland
 _____ wetland: _____

Max Width: _____ Max Depth: _____ Per: _____ Int: _____
 Bank Type: vertical gradual undercut other: _____
 Substrate (>30%): mud gravel sand bedrock
 _____ peat/muck

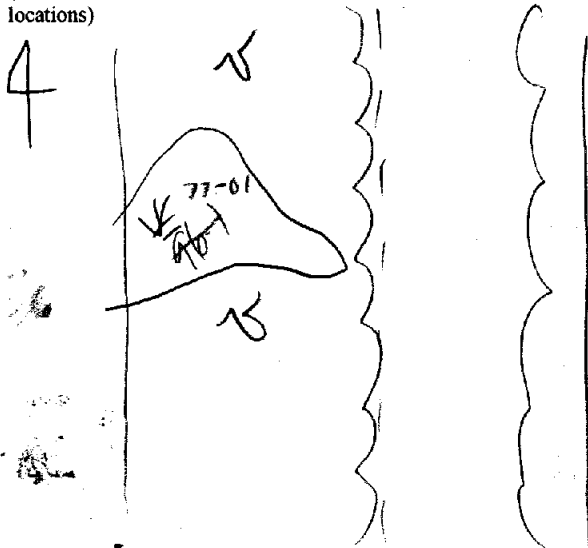
Stream Name: _____ Wetland: no wetland
 _____ wetland: _____

Max Width: _____ Max Depth: _____ Per: _____ Int: _____
 Bank Type: vertical gradual undercut other: _____
 Substrate (>30%): mud gravel sand bedrock
 _____ peat/muck

Notes: _____

SKETCH: wetland (&) stream ID: _____

(include: North Arrow, Photo # and Location/Direction, Landmarks, Flag locations)



Date: 5.23.11	Project Name: QM1
Job #: 532	Cowardin Class(es) & %: PEMIE
Observers: HSW CJF	Photo(s) #:
Comments:	

Dominant Vegetation (by stratum):

Herbs	Herbs (cont.)	Shrubs/Saplings	Trees	Vines
Watercress				
unid		Ø	Ø	Ø
Onoser				
galium				
Tub pub				

Wetland Hydrology Indicators:

Perm. Flooded Seasonally Flooded/Saturated Saturated
(approx. depth:) (approx. depth:)

*A1 - Surface water	*B5 - Iron deposits	*B15 - Marl deposits	*C7 - Thin muck surface
*A2 - High water table	B6 - Surface soil cracks	B16 - Moss trim lines	C8 - Crayfish burrows
*A3 - Saturation	*B7 - Inundated aerial imagery	*C1 - Hydrogen sulfide odor	C9 - Saturation visible on aerial imagery
*B1 - Water marks	*B8 - Sparse veg. concave surface	C2 - Dry-season water table	*D1 - Stunted or stressed plants
*B2 - Sediment deposits	*B9 - Water-stained leaves	*C3 - Oxidized rhizospheres - living root	*D2 - Geomorphic position
*B3 - Drift deposits	B10 - Drainage patterns	*C4 - Presence of reduced iron	*D3 - Shallow aquitard
*B4 - Algal mat or crust	*B13 - Aquatic fauna	*C6 - Recent iron reduction in tilled soils	*D4 - Microtopographic relief
*Denotes Primary Indicator			*D5-FAC-neutral test

Representative Hydric Soils:

Depth (in)	Horizon	Texture	Color	Redox. Features	Other
2-0	1	org	2.5Y 2.5/1		
0-7	2	LS	2.5Y 5/1		
7-16	3	LS	2.5Y 4/2	10YR 9/4	

Hydric Soil Indicator & Reference:

Other Soil Comments:

F6

Functions & Values: place an * next to primary f&v & circle all that apply

- Groundwater Recharge/Discharge ■ Floodwater Alteration ■ Fish & Shellfish Habitat
■ Sed./Tox./Pathogen Retention ■ Nutrient R/R/T ■ Production Export
■ Sediment/Shoreline Stabilization ■ Wildlife Habitat ■ Recreation
■ Educational/Scientific Value ■ Uniqueness/Heritage ■ Visual Quality/Aesthetics
■ RTE Habitat

GPS Tech:

(JF)

GPS File:

Stream Data:

Stream Name: _____ Wetland: no wetland

_____ wetland: _____

Max Width: _____ Max Depth: _____ Per: _____ Int: _____

Bank Type: vertical _____ gradual _____ undercut _____ other: _____

Substrate (>30%): _____ mud _____ gravel _____ sand _____ bedrock

_____ peat/muck

Stream Name: _____ Wetland: no wetland

_____ wetland: _____

Max Width: _____ Max Depth: _____ Per: _____ Int: _____

Bank Type: vertical _____ gradual _____ undercut _____ other: _____

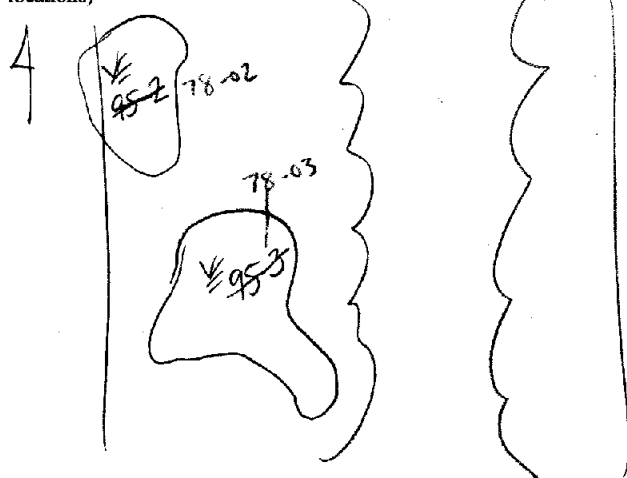
Substrate (>30%): _____ mud _____ gravel _____ sand _____ bedrock

_____ peat/muck

Notes:

SKETCH: wetland (&) stream ID: _____

(include: North Arrow, Photo # and Location/Direction, Landmarks, Flag locations)



Date: 5.29.17	Project Name: QM1
Job #: 532	Cowardin Class(es) & %: PPO V4E
Observers: HSW CTF	Photo(s) #:
Comments: logged - Selective	

Dominant Vegetation (by stratum):

Herbs	Herbs (cont.)	Shrubs/Saplings	Trees	Vines
typ lat		abi bal	fra nig	Ø
ono sen		spi lat	abi bal	
car lvr		vac cor	bet pop	
imp cap		ulm ame		
osm cm		fra nig		
fig cor		bet pop		

Wetland Hydrology Indicators:

Perm. Flooded (approx. depth:)	Seasonally Flooded/Saturated (approx. depth:)	X Saturated	
*A1 - Surface water	*B5 - Iron deposits	*B15 - Marl deposits	*C7 - Thin muck surface
*A2 - High water table	B6 - Surface soil cracks	B16 - Moss trim lines	C8 - Crayfish burrows
*A3 - Saturation	*B7 - Inundated aerial imagery	*C1 - Hydrogen sulfide odor	C9 - Saturation visible on aerial imagery
*B1 - Water marks	*B8 - Sparse veg. concave surface	C2 - Dry-season water table	*D1 - Stunted or stressed plants
*B2 - Sediment deposits	*B9 - Water-stained leaves	*C3 - Oxidized rhizospheres - living root	*D2 - Geomorphic position
*B3 - Drift deposits	B10 - Drainage patterns	*C4 - Presence of reduced iron	*D3 - Shallow aquitard
*B4 - Algal mat or crust	*B13 - Aquatic fauna	*C6 - Recent iron reduction in tilled soils	*D4 - Microtopographic relief
*Denotes Primary Indicator			*D5-FAC-neutral test

Representative Hydric Soils:

Depth (in)	Horizon	Texture	Color	Redox. Features	Other
2-0	O	org	bik	—	—
0-2	A	rocky m m	dyr 4/1		
2-6	B	vt s	2.5/5/2	10yr 4/4	10%

Hydric Soil Indicator & Reference:

Other Soil Comments:

F6 Nat'l Ind

Functions & Values: place an * next to primary f&v & circle all that apply
☒ Groundwater Recharge/Discharge ☐ Floodwater Alteration ☐ Fish & Shellfish Habitat
☒ Sed./Tox./Pathogen Retention ☒ Nutrient R/R/T ☐ Production Export
☒ Sediment/Shoreline Stabilization ☒ Wildlife Habitat ☐ Recreation
☒ Educational/Scientific Value ☐ Uniqueness/Heritage ☐ Visual Quality/Aesthetics
☒ RTE Habitat

GPS Tech: CTF

GPS File:

Stream Data:

Stream Name: 1-STR-92-1 Wetland: no wetland

X wetland: 92-2

Max Width: Max Depth: Per: Int: X

Bank Type: vertical gradual X undercut other:

Substrate (>30%): X mud gravel sand bedrock X rock
peat/muck

Stream Name: 1-STR-92-2 Wetland: no wetland

X wetland: 92-2

Max Width: 4' Max Depth: 8" Per: Int: X

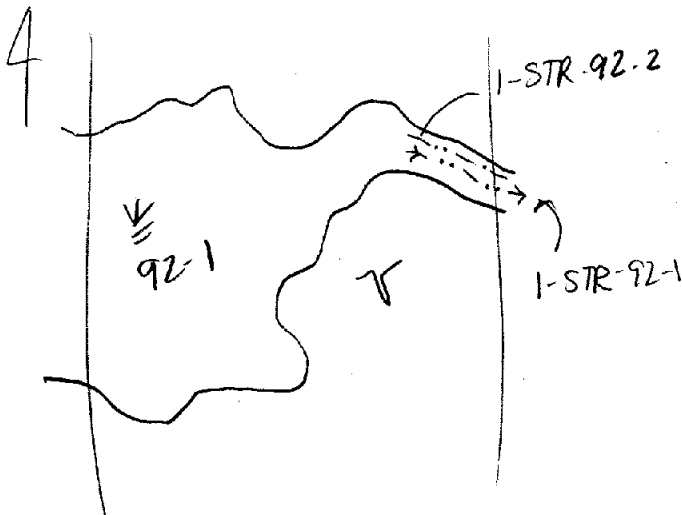
Bank Type: vertical X gradual undercut other:

Substrate (>30%): X mud gravel sand bedrock X rock
peat/muck

Notes:

SKETCH: wetland (&) stream ID:

(include: North Arrow, Photo # and Location/Direction, Landmarks, Flag locations)



Date: <u>5.18.17</u>	Project Name: <u>QMI</u>
Job #: <u>532</u>	Cowardin Class(es) & %: <u>PFO4E(50%) PSS(50%)</u>
Observers: <u>HSW DHP</u>	Photo(s) #:
Comments:	

Dominant Vegetation (by stratum):

Herbs	Herbs (cont.)	Shrubs/Saplings	Trees	Vines
<u>ono sen</u>		<u>spi lat</u>	<u>abi bal</u>	
<u>white flamm</u>		<u>spi tom</u>	<u>ace rh</u>	
<u>spi lat</u>		<u>abi bal</u>		
<u>sphag.</u>		<u>pop bal</u>		
<u>mia can</u>				

Wetland Hydrology Indicators:

<input type="checkbox"/> Perm. Flooded (approx. depth:)	<input type="checkbox"/> Seasonally Flooded/Saturated (approx. depth:)	<input checked="" type="checkbox"/> Saturated <u>free water in pit</u>
*A1 - Surface water	*B5 - Iron deposits	*B15 - Marl deposits
*A2 - High water table	B6 - Surface soil cracks	B16 - Moss trim lines
*A3 - Saturation	*B7 - Inundated aerial imagery	*C1 - Hydrogen sulfide odor
*B1 - Water marks	*B8 - Sparse veg. concave surface	C2 - Dry-season water table
*B2 - Sediment deposits	*B9 - Water-stained leaves	*C3 - Oxidized rhizospheres - living root
*B3 - Drift deposits	B10 - Drainage patterns	*C4 - Presence of reduced iron
*B4 - Algal mat or crust	*B13 - Aquatic fauna	*C6 - Recent iron reduction in tilled soils
*Denotes Primary Indicator		*D5-FAC-neutral test

Representative Hydric Soils:

Depth (in)	Horizon	Texture	Color	Redox. Features	Other
<u>0-2</u>	<u>1</u>	<u>loam</u>	<u>blk</u>		
<u>2-6</u>	<u>2</u>	<u>sil</u>	<u>10YR 3/2</u>	<u>10YR 4/4 15%</u>	
<u>6-12</u>	<u>3</u>	<u>sil</u>	<u>2.5Y 4/2</u>	<u>10YR 4/4 20%</u>	

Hydric Soil Indicator & Reference:

Other Soil Comments:

FA

Functions & Values: place an * next to primary f&v & circle all that apply

☒ Groundwater Recharge/Discharge
 ☒ Floodwater Alteration
 ☐ Fish & Shellfish Habitat
 ☐ Sed./Tox./Pathogen Retention
 ☐ Nutrient R/R/T
 ☐ Production Export
 ☐ Sediment/Shoreline Stabilization
 ☒ Wildlife Habitat
 ☐ Recreation
 ☐ Educational/Scientific Value
 ☐ Uniqueness/Heritage
 ☐ Visual Quality/Aesthetics
 ☐ RTE Habitat

GPS Tech:

DHP

GPS File:

Stream Data:

Stream Name: _____ Wetland: ☐ no wetland

☐ wetland:

Max Width: _____ Max Depth: _____ Per: _____ Int: _____

Bank Type: ☐ vertical ☐ gradual ☐ undercut ☐ other:

Substrate (>30%): ☐ mud ☐ gravel ☐ sand ☐ bedrock

☐ peat/muck

Stream Name: _____ Wetland: ☐ no wetland

☐ wetland:

Max Width: _____ Max Depth: _____ Per: _____ Int: _____

Bank Type: ☐ vertical ☐ gradual ☐ undercut ☐ other:

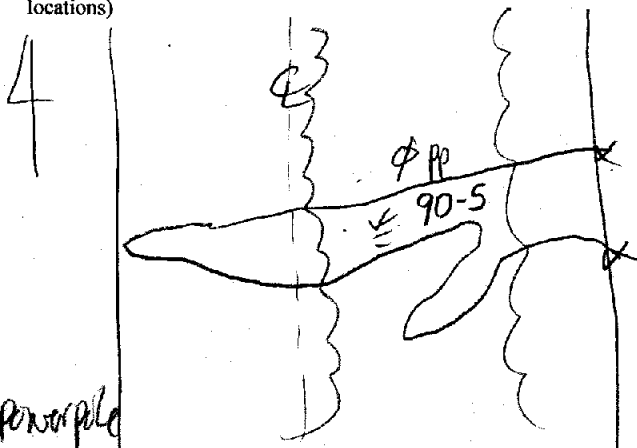
Substrate (>30%): ☐ mud ☐ gravel ☐ sand ☐ bedrock

☐ peat/muck

Notes:

SKETCH: wetland (&) stream ID: _____

(include: North Arrow, Photo # and Location/Direction, Landmarks, Flag locations)



Date:	Project Name:
Job #:	Cowardin Class(es) & %: PSSIE
Observers:	Photo(s) #:
Comments: <i>has been lifted up by heavy equipment</i>	

Dominant Vegetation (by stratum):

Herbs	Herbs (cont.)	Shrubs/Saplings	Trees	Vines
Rub rub	Eg. pal	Spi. tom		
Osm. cln	Tha. tha	Aln. inc		
Osm. gen	June off			
Eut. gra				
Sol. ny				

Wetland Hydrology Indicators:

Perm. Flooded (approx. depth:)	Seasonally Flooded/Saturated (approx. depth:)	✓ Saturated	
*A1 - Surface water	*B5 - Iron deposits	*B15 - Marl deposits	*C7 - Thin muck surface
*A2 - High water table	B6 - Surface soil cracks	B16 - Moss trim lines	C8 - Crayfish burrows
*A3 - Saturation	*B7 - Inundated aerial imagery	*C1 - Hydrogen sulfide odor	C9 - Saturation visible on aerial imagery
*B1 - Water marks	*B8 - Sparse veg. concave surface	C2 - Dry-season water table	*D1 - Stunted or stressed plants
*B2 - Sediment deposits	*B9 - Water-stained leaves	*C3 - Oxidized rhizospheres - living root	*D2 - Geomorphic position
*B3 - Drift deposits	B10 - Drainage patterns	*C4 - Presence of reduced iron	*D3 - Shallow aquitard
*B4 - Algal mat or crust	*B13 - Aquatic fauna	*C6 - Recent iron reduction in tilled soils	*D4 - Microtopographic relief
*Denotes Primary Indicator			*D5-FAC-neutral test

Representative Hydric Soils:

Depth (in)	Horizon	Texture	Color	Redox. Features	Other
0-4	A	SIL	10YR 3/2		
4-16+	B	SIL	5Y 5/2	10YR 5/6CM	4% Gravelly

Hydric Soil Indicator & Reference:

Other Soil Comments:

~~WET-85-5~~
WET-88-05

Sam Hayden 5/11/17

Vg, soil, hydro good. Added long section to
N boundary. Area highly impacted by equipment/ATV
Ruts. S.H.

Maine Power Reliability Project
WETLAND SUMMARY FORM

Team E

Observers: SEK, SHS, HBC Date: 10/3/07
Town: N. ANSON and EMBDEN Series: 1-8
Segment #: 12 CMP Section #: 63 CMP Pole #: 176 Wetland ID #: 1
Stream/Waterbody ID: _____ Corps plot: Yes ☒ No

Dominant NWI Class: PEM (90%)

Other NWI Classes: PSS (10%)

Representative Wetland Vegetation (by Strata):

herb
tearthumb
woolgrass (x)
white bonnet
flattop aster
sensitive fern
Rubus hispids
Swamp candles
marsh fern
Shrub
spiraea lat. (x)
willow sp.

Representative Wetland Hydrology

☐ Permanently Flooded (approximate depth -)
☐ Seasonally Flooded (approximate depth -)
☐ Saturated

Hydrologic Indicators: ☐ Silt Deposition
☒ Water Marks ☐ Drift Lines ☒ Water-Stained Leaves
☐ Drainage Patterns ☐ Buttressed Trees ☐ Surface Scouring 1.5
☐ Elevated Roots

Other Observations:

Representative
Wetland Soils:
☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-6	A	10yr 3/2a		Silt loam
6-11	Bw	10yr 5/2		" "
11-18+	Fig	10yr 6/1	10yr 5/6	Silty clay loam

Other Observations:

Meets NEIWPCC (2004) Criteria 1.1

somewhat common,
small, distinct

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses,
potential VP): moose browse (willow)

Notes: mounds included (my sented fern)

☐ Cedar Swamp

☐ Wetland of Special Significance

Photo # 2, 4

SKETCH ON BACK

Maine Power Reliability Project

Team E

WETLAND SUMMARY FORM

Observers: SEK SLS LKC Date: 10/3/07
 Town: N. ANSON and EMBDEN Series: 1-8
 Segment #: 12 CMP Section #: 63 CMP Pole #: 176 Wetland ID #: 1
 Stream/Waterbody ID: _____ Corps plot: Yes ☒ No

Dominant NWI Class: PEM (90%)

Other NWI Classes: PSS (10%)

Representative Wetland Vegetation (by Strata):

herb
 tearthumb sensitive fern
 Woolgrass (x) Rubus hispidus
 white boneat Swamp candles
 Flattop aster marsh fern
 Shrub
 Spiraea lat. (x)
 willow sp.

Representative Wetland Hydrology

☐ Permanently Flooded (approximate depth -) ☐ Seasonally Flooded (approximate depth -) ☐ Saturated

Hydrologic Indicators: ☐ Silt Deposition ☐ Water-Stained Leaves
☒ Water Marks ☐ Drift Lines ☒ Surface Scouring
☐ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots

Other Observations:

Representative Wetland Soils:

☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-6	A	10yr 3/2		Silt loam
6-11	Bw	10yr 5/2		" "
11-18+	Bg	10yr 6/1	10yr 5/6	Silty clay loam

Other Observations:

Meets NEIWPCC (2004) Criteria NA

some what common, small, distinct

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. ☐ Intermittent ☐
 Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
 Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Stream # 2 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. ☐ Intermittent ☐
 Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
 Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP): moose browse (willow)

Notes: mounds included (may scented fern)

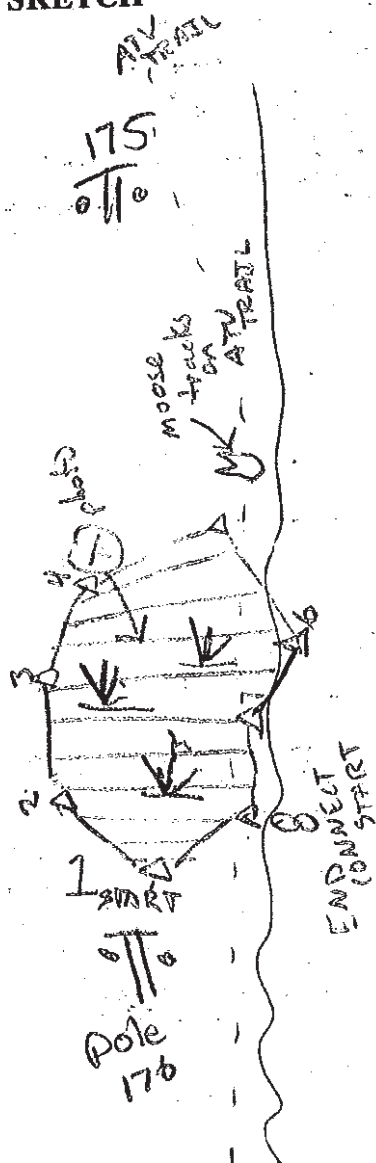
☐ Cedar Swamp

☐ Wetland of Special Significance

Photo # 2, 4

SKETCH ON BACK

WETLAND SKETCH



Line Flagging Series
1-8

Possible Functions and Values:

- ☐ Groundwater Recharge/Discharge
- ☐ Fish and Shellfish Habitat
- ☐ Nutrient Removal
- ☐ Sediment/Shoreline Stabilization
- ☐ Recreation
- ☐ Uniqueness/Heritage
- ☐ Endangered Species Habitat

- ☐ Floodflow Alteration
- ☐ Sediment/Toxicant Retention
- ☐ Production Export
- ☒ Wildlife Habitat
- ☐ Educational/Scientific Value
- ☐ Visual Quality/Aesthetics
- ☒ Other *SMU*

Checklist:

- ☒ Wetland ID# *E12-63-176-1*
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features – roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☒ Location of important wildlife sign.

**Non-WOSS
Data Form Examples**

Segment 4

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Maine Power Reliability Project

Team 12

WETLAND SUMMARY FORM

WET-146-05

Observers: MP AG MC Date: 10-17-07
 Town: Lewiston Series: WER
 Segment #: 17 CMP Section #: 64 CMP Pole #: 25 Wetland ID #: 1
 Stream/Waterbody ID: _____ Corps plot: Yes ☒ No

Dominant NWI Class: Pem

Other NWI Classes:

Representative Wetland Vegetation (by Strata):

Gly can
 Scirpus
 Juncus
 Eriophorum
 ASTOMY
 Rubus
 Shrub
 Sp. lat
 v. dent
 Aln. inc

Representative Wetland Hydrology

☐ Permanently Flooded (approximate depth -) ☒ Seasonally Flooded (approximate depth - 3") ☐ Saturated

Hydrologic Indicators: ☐ Silt Deposition ☐ Water-Stained Leaves
☒ Water Marks ☐ Drift Lines ☒ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots

Other Observations:

Representative Wetland Soils:

☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
D-B	A ₁	5Y 4/2	10YR 4/6	S&Lo
8-12+	B ₁	5Y 5/2	5Y 6/1	S&Lo

Other Observations:

Meets NEIWPCC (2004) Criteria VI

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder
 _____ Bedrock

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder
 _____ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

POT ABA /VP in RUTS

Notes:

N/A

☐ Cedar Swamp

☐ Wetland of Special Significance

Photo # 8/9

SKETCH ON BACK

Sam Hayden 5/19/17

Added Aln. inc to veg. soil horizon and delineation symbol

WETLAND SUMMARY FORM

Observers: MP AG MC Date: 10-17-07
 Town: LEWISTON Series: OVER
 Segment #: 17 CMP Section #: 64 CMP Pole #: 25 Wetland ID #: 1
 Stream/Waterbody ID: _____ Corps plot: Yes ☒ No ☐
 Dominant NWI Class: PEM1 Other NWI Classes: _____

Representative Wetland Vegetation (by Strata):

Gly can Astomy Shag
Scoyp Rob hus Sp. lot
low erf vib dent
Earth gram

Representative Wetland Hydrology

_____ Permanently Flooded (approximate depth -) ☒ Seasonally Flooded (approximate depth - 3") _____ Saturated

Hydrologic Indicators: _____ Silt Deposition _____ Water-Stained Leaves
☒ Water Marks _____ Drift Lines ☒ Surface Scouring
☒ Drainage Patterns _____ Buttressed Trees _____ Elevated Roots

Other Observations: _____

Representative Wetland Soils:

☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
<u>D-B</u>	<u>A.</u>	<u>5Y 4/2</u>	<u>10Y R 4/6</u>	<u>Sa lo</u>
<u>8-12+</u>	<u>B.</u>	<u>5Y 5/2</u>	<u>5Y 6/1</u>	<u>S. lo</u>

Other Observations: _____

Meets NEIWPCC (2004) Criteria VI

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder
 _____ Bedrock

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder
 _____ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP): POT ABA /VP in RUB

Notes: _____

☐ Cedar Swamp☐ Wetland of Special SignificancePhoto # 8/9

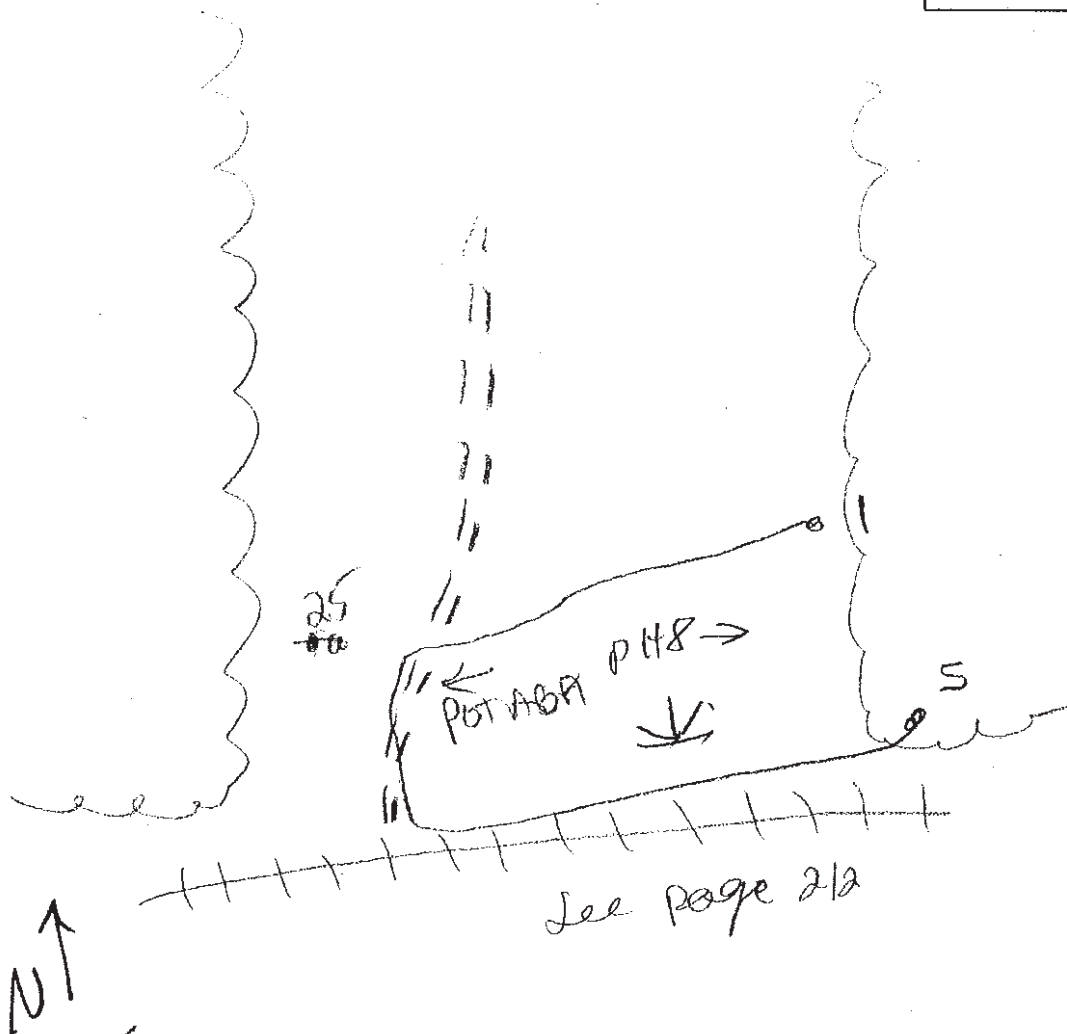
SKETCH ON BACK

Page 1/2

WETLAND SKETCH

Line Flagging Series
1-5

pH9 Flag



Possible Functions and Values:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Groundwater Recharge/Discharge | <input type="checkbox"/> Floodflow Alteration |
| <input type="checkbox"/> Fish and Shellfish Habitat | <input type="checkbox"/> Sediment/Toxicant Retention |
| <input type="checkbox"/> Nutrient Removal | <input type="checkbox"/> Production Export |
| <input type="checkbox"/> Sediment/Shoreline Stabilization | <input type="checkbox"/> Wildlife Habitat |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Educational/Scientific Value |
| <input type="checkbox"/> Uniqueness/Heritage | <input type="checkbox"/> Visual Quality/Aesthetics |
| <input type="checkbox"/> Endangered Species Habitat | <input type="checkbox"/> Other |

Checklist:

- ☒ Wetland ID# B7-64-25-1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features – roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☒ Location of important wildlife sign.

WETLAND SUMMARY FORM

Observers: MP, AG, ME Date: 10-17-07
 Town: Leeds Series: 0062
 Segment #: 17 CMP Section #: 64 CMP Pole #: 25 Wetland ID #: 1
 Stream/Waterbody ID: _____ Corps plot: Yes ☒ No

Dominant NWI Class: Pem1Other NWI Classes: PPOL

Representative Wetland Vegetation (by Strata):

Pem1
Shrub
Spil lat
Alnus rug
Blechn
rob dent
Herb
Alnus rug
Thy lat
phellam
Eup pat
phellam
Alnus rug
sol gog
Cont.
Acer rub
Ulm Amer
Bet pap
Alnus rug

Representative Wetland Hydrology

_____ Permanently Flooded (approximate depth -)
☒ Seasonally Flooded (approximate depth - 12")
 _____ Saturated

Hydrologic Indicators: _____ Silt Deposition _____ Water-Stained Leaves
☒ Water Marks _____ Drift Lines ☒ Surface Scouring
☒ Drainage Patterns _____ Buttressed Trees _____ Elevated Roots

Other Observations:

Representative Wetland Soils:

☒ Mineral
 _____ Organic

Depth	Horizon	Color	Redox Features	Texture
0-2	A ₁	5Y3/2	—	Silt
2-10+	B ₁	5Y4/2	5Y4/1	Silt
			10Y2/6	

Other Observations:

Meets NEIWPCC (2004) Criteria VI

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder
 _____ Bedrock

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder
 _____ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

POT ABH/VP in ROTS

Notes:

☐ Cedar Swamp☐ Wetland of Special SignificancePhoto # 1011

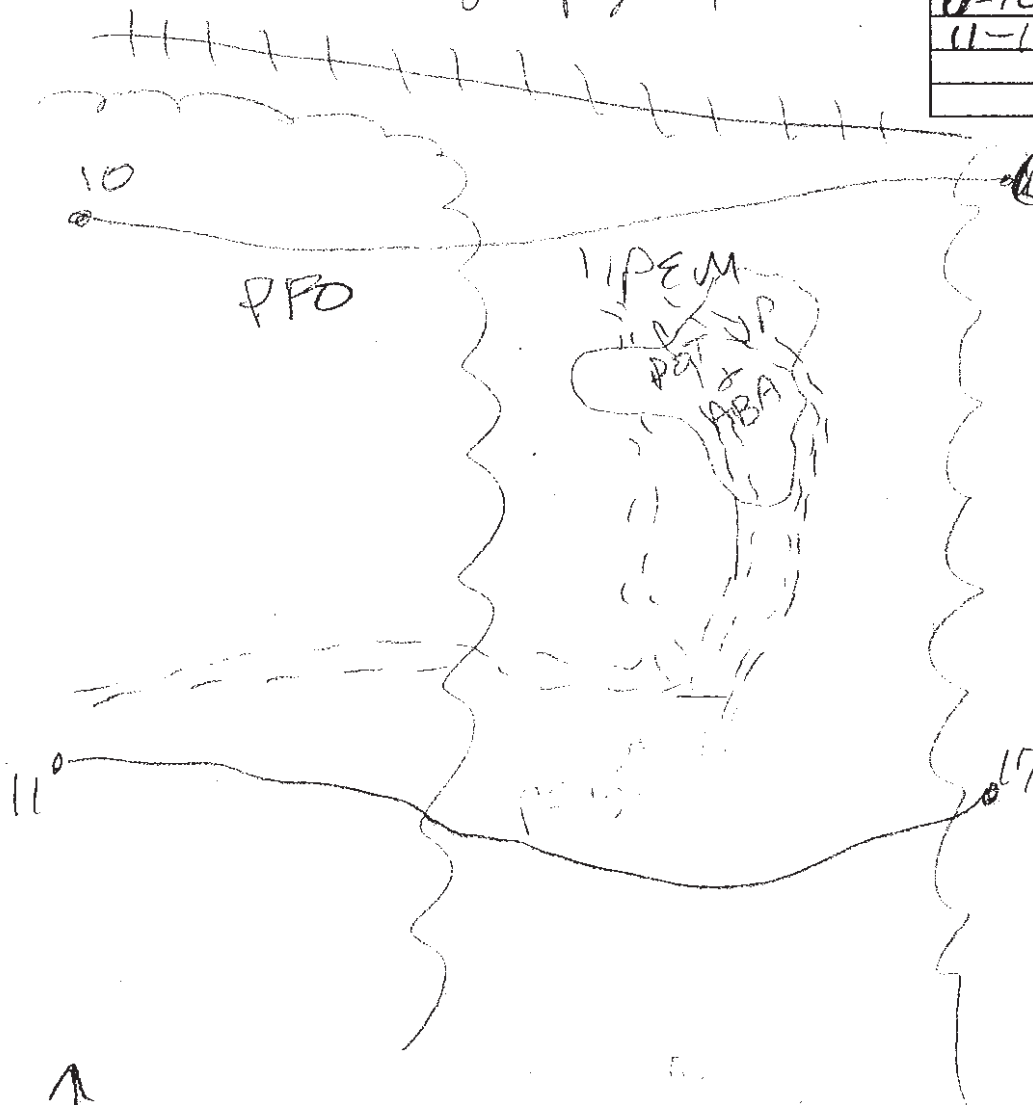
SKETCH ON BACK

Page 2 1/2

WETLAND SKETCH

See page 1 1/2

Line Flagging Series
6-10
11-17



Possible Functions and Values:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Groundwater Recharge/Discharge | <input type="checkbox"/> Floodflow Alteration |
| <input type="checkbox"/> Fish and Shellfish Habitat | <input type="checkbox"/> Sediment/Toxicant Retention |
| <input checked="" type="checkbox"/> Nutrient Removal | <input checked="" type="checkbox"/> Production Export |
| <input type="checkbox"/> Sediment/Shoreline Stabilization | <input checked="" type="checkbox"/> Wildlife Habitat |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Educational/Scientific Value |
| <input type="checkbox"/> Uniqueness/Heritage | <input type="checkbox"/> Visual Quality/Aesthetics |
| <input type="checkbox"/> Endangered Species Habitat | <input type="checkbox"/> Other |

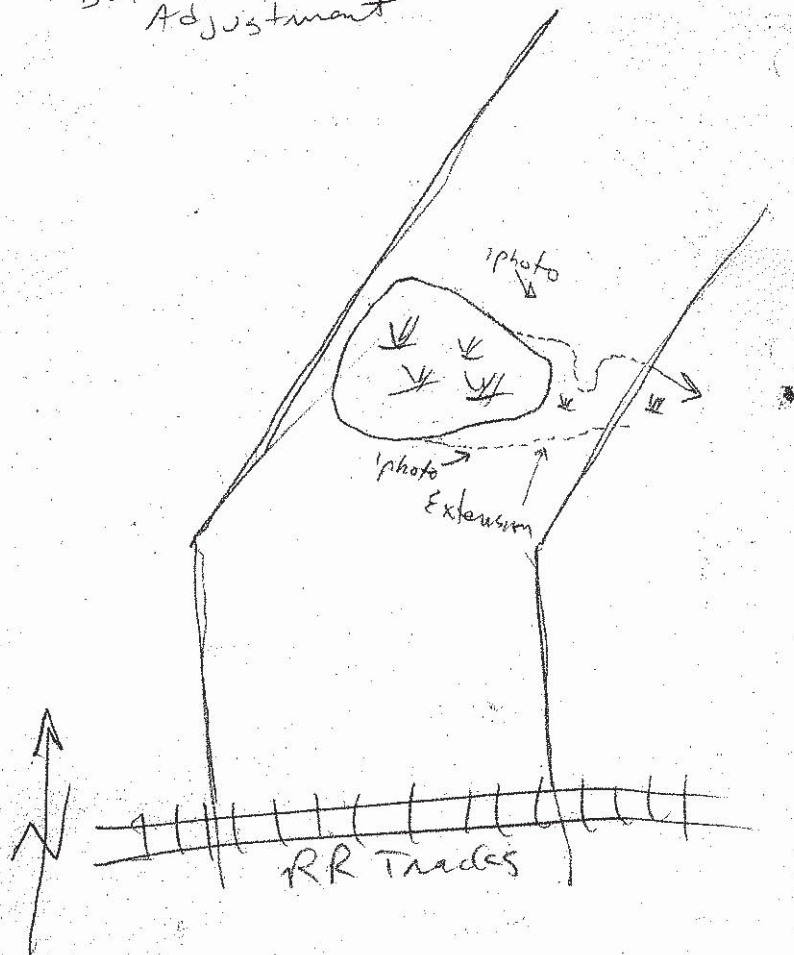
Checklist:

- ☒ Wetland ID# B17-64-25.1 cont.
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features – roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☒ Location of important wildlife sign.

NAI-17-PF-1

9/3/2009

B-17-64-24-2
Adjustment



PEM
PFO/SS/

NAI-17-PF-4 9/3/2009

B-17-64-25-1

Wetland boundary
South east side slightly

Boundary not significantly
different than original
boundary, except for the
South side which is ~50' off.

No photo

Aerob
Amar
Cary
Sci
Lyt

Adjusted
B-17-64-24-2 NAI-17-PF-1

Adjusted northern wetland
boundary to encompass more
wetlands. See original
Data sheets
for soils/hydrology

Mim Holly
Sphag
Rub Chisp
Ilex vert
Vib cgs
Osm cin
Jun off
Spilart



Maine Power Reliability Project

Team ☒

WETLAND SUMMARY FORM

Observers: M.P. Ag. MC Date: 10-18-07
 Town: Lewiston Series: over
 Segment #: 17 CMP Section #: 64 CMP Pole #: 32 Wetland #: 1
 Stream/Waterbody ID: Corps plot: Yes ☒ No

Dominant NWI Class: BSS1Other NWI Classes: PF044

Representative Wetland Vegetation (by Strata):

Shrub
Ilex
Aln rug
Sp. lat
Sp. tom
Sci. cy P
Thel pal
Can lac
Cott. agr
As. umb
Rub. hrs
Mit. rep
Sphagnum
ACE rug
Bet. pap
Pia. stro
TUS. can

Representative Wetland Hydrology

☐ Permanently Flooded
 (approximate depth -)

☒ Seasonally Flooded
 (approximate depth - 6")

☐ Saturated

Hydrologic Indicators: ☐ Silt Deposition ☐ Water-Stained Leaves
☐ Water Marks ☐ Drift Lines ☒ Surface Scouring
☐ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots

Other Observations:

Dense Sphagnum

Representative Wetland Soils:

☐ Mineral
☒ Organic

Depth	Horizon	Color	Redox Features	Texture
18-16	01	10YR2/1	-	Fibric
16-0	0a	10YR2/1	-	Scarpic

Other Observations:

Meets NEIWPCC (2004) Criteria III

Stream # 1 Data:

Width (Bank-Bank): Depth @ Center: Peren. Intermittent
 Bank Configuration: Undercut Vertical Gradual
 Channel Substrate: Peat-Muck Silt-Mud Sand Gravel/Cobble Boulder
 Bedrock

Stream # 2 Data:

Width (Bank-Bank): Depth @ Center: Peren. Intermittent
 Bank Configuration: Undercut Vertical Gradual
 Channel Substrate: Peat-Muck Silt-Mud Sand Gravel/Cobble Boulder
 Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

Notes:

☐ Cedar Swamp☐ Wetland of Special Significance

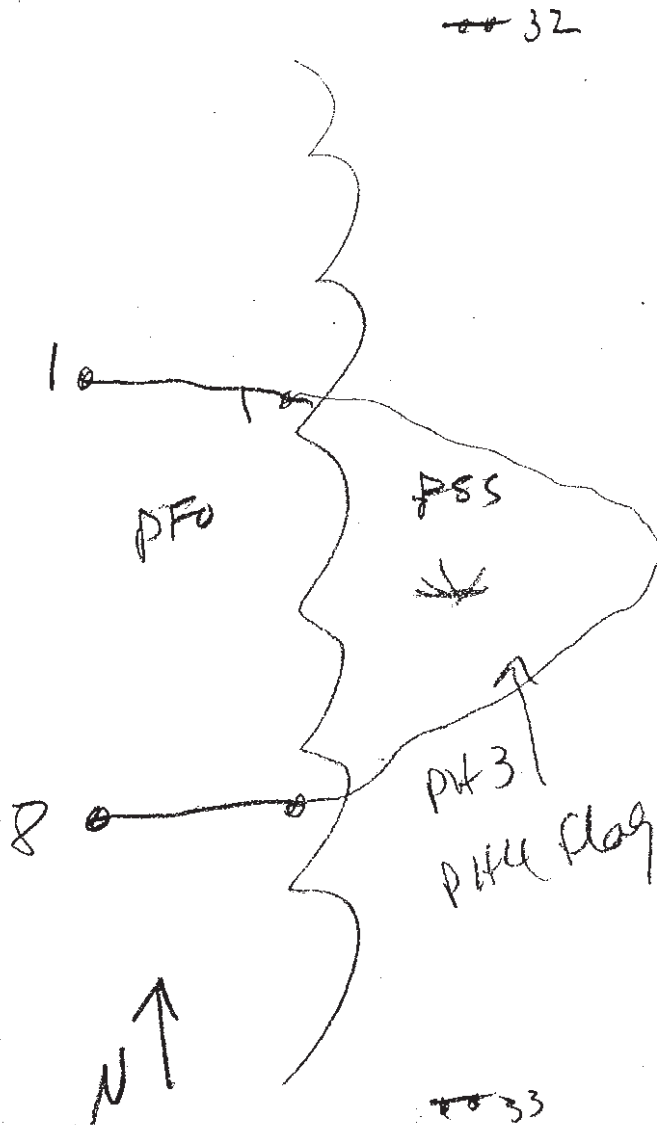
Photo #

3/4

SKETCH ON BACK

WETLAND SKETCH

Line Flagging Series
1-8



Possible Functions and Values:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Groundwater Recharge/Discharge | <input type="checkbox"/> Floodflow Alteration |
| <input type="checkbox"/> Fish and Shellfish Habitat | <input type="checkbox"/> Sediment/Toxicant Retention |
| <input type="checkbox"/> Nutrient Removal | <input type="checkbox"/> Production Export |
| <input type="checkbox"/> Sediment/Shoreline Stabilization | <input type="checkbox"/> Wildlife Habitat |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Educational/Scientific Value |
| <input type="checkbox"/> Uniqueness/Heritage | <input type="checkbox"/> Visual Quality/Aesthetics |
| <input type="checkbox"/> Endangered Species Habitat | <input type="checkbox"/> Other |

Checklist:

- ☒ Wetland ID# B17-64-32-1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features – roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☐ Location of important wildlife sign.

Z-17-64-68-2

NAT-17-IB-30 OMS/EP

New Wetlands 9/8/2009

Z-17-64-68-1
Z-17-64-68-2

PEM/PSS

Soils

0-8"-0;

8-12"-A

12-18"-B

10YR 3/2

10YR 6/1

10YR 5/6 Mottled

A/D

Hydro

Saturated

water 2"

in pit

drains

problems

Silo

Veg

Spina

Car

Spina

Marsh

Open

Open

Open

Open

Open

Open

Open

Open

Open

Open

Open

Open

Open

Open

Open

Open

Open

Open

Open

Open

Milk Snake

14"

Wetland 1 - NAT Observation

Wetland 2 - TRC new

delineation

Sam Hyden 5/21/17

Veg, soils, hydro, delineation good,
correct. S.H.



NAT-17-IB-30

New Wetlands Z-17-64-68-1

Z-17-64-68-2

Pale 68

60

Large

Rocks

Outcrop

photo

photo

photo

photo

photo

photo

photo

photo

photo

photo

photo

photo

photo

photo

photo

photo

photo

photo

photo

Z-17-64-68-1

Z-17-64-68-2

(1-9)

NAI-17-IB-30 DB/IRP
New wetlands 9/8/2009

Z-17-64-68-1
Z-17-64-68-2

Soils

0-8"-O_i

8-12"-A

12-18"-B

10YR 3/2

10YR 6/1

10YR 5/6 Mottled
A/D

PEM/PSS

Hydro

Saturated
water 2"
in pit

Silo - drainage
patterns

Veg

Sphag

Car. cr.

Spi. lat

Marsh fern

Osm. c. m.

Spi. tom

Ger. per

Lyster

Sci. cyp

Vet. has

Imp. cap

Egu. arv

Salix spp

Car. bio

Pots. sa

Car. l. v.

Milk Snake
14"

Wetland 1 - NAI Observation

Wetland 2 - TRC new
delineation

NAI-17-IB-30

new wetlands Z-17-64-68-1

Z-17-64-68-2

Pole 68

22

Large
Rock
Outcrop

1 photo

23

Z-17-64-68-1

1

1 photo

Z-17-64-68-2
(1-9)



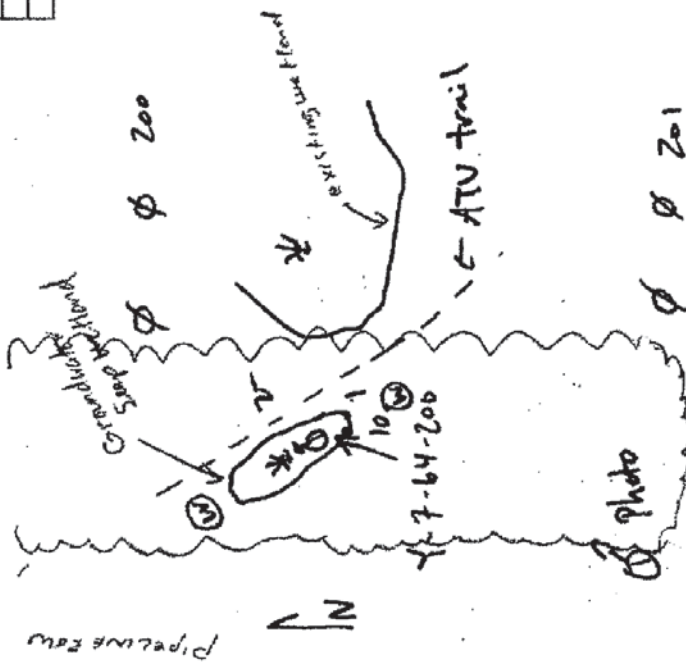
Sam Hayden 5/24/17


Veg, soil, hydro, delineation goal

Line Flagging Series			

WILLIAM SNEIGH

10 days



FIELD 

- | | |
|----------------------------------|------------------------------|
| Possible Functions and Values: | |
| X Groundwater Recharge/Discharge | Floodflow Alteration |
| Fish and Shellfish Habitat | Sediment/Toxicant Retention |
| Nutrient Removal | Production Export |
| Sediment/Shoreline Stabilization | Wildlife Habitat |
| Recreation | Educational/Scientific Value |
| Uniqueness/Heritage | Visual Quality/Aesthetics |
| Endangered Species Habitat | Other |

Checklist: 5-7-64-200

- Wetland ID# _____
North arrow: _____
Detailed sketch of wetland boundary and flagging sequence.
Natural and man-made features - roads, culverts, outcrops, structures, etc.
Photo locations.
Location of important wildlife sign.

WETLAND SUMMARY FORM
 NAI-17-JB-Z
 AC-8B
 Y

Observer: AF-RP Date: _____
 Town: _____ Series: _____
 Segment #: 1 CMP Section #: 64 CMP Pole #: 200 Wellhead #: _____
 Stream/Waterbody ID: _____ Corps plot: Yes ☒ No ☐
 Dominant NWI Class: R50 Other NWI Classes: _____

Representative Wetland Vegetation (by Strata):

I *Acer rubrum*
Fraxinus pennsylvanica

II *Viburnum dentatum*
Green Ash

III *H. ovata* *Sambucus*
Spiraea latifolia
Equisetum sp.

Representative Wetland Hydrology:

_____ Permanently Flooded (approximate depth - .)
 _____ Seasonally Flooded (approximate depth - .)
☒ Saturated

Hydrologic Indicators: ☒ Silt Deposition ☒ Water-Stained Leaves
☐ Water Marks ☒ Drift Lines ☒ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots

Other Observations:

Representative Wetland Soils:	Depth	Horizons	Color	Redox Features	Texture
✓ Mineral	0-14	A	10YR 2/7		Loam
— Organic	14-11	B ₁	6.5Y 1/1	10YR 4/6, C	Very clayey
	11	B ₂	2.5Y 5/1	10YR 4/6, C	Very clayey

Other Observations:

Meets NEIWPCC (2004) Criteria

Stream # 1 Data:
Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
Bedrock _____

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren _____ Intermittent _____

Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____

Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____

_____ Bedrock _____ Bedrock _____

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams, dens, egg masses, potential VP):

NOTE: narrow drainage provided to dry grass
dug well above & below wetland

☐ Cedar Swamp ☐ Wetland of Special Significance

NAI-17-JB-2

WETLAND SUMMARY FORM

Observers: AF-RP Date: _____
 Town: _____ Series: _____
 Segment #: 7 CMP Section #: 64 CMP Pole #: 200 Wetland #: ✓
 Stream/Waterbody ID: _____ Corps plot: Yes ☒ No ☒

Dominant NWI Class: PFO

Other NWI Classes: _____

Representative Wetland Vegetation (by Strata):

I Acer rubrum
Fraxinus pennsylvanica
S Viburnum dentatum
Green Ash
H Onoclea sensibilis
Sperma latifolia
Equisetum sp.

Representative Wetland Hydrology

_____ Permanently Flooded (approximate depth -) _____ Seasonally Flooded (approximate depth -) ☒ Saturated

Hydrologic Indicators: ☒ Silt Deposition ☒ Water-Stained Leaves
☒ Water Marks ☒ Drift Lines ☒ Surface Scouring
☒ Drainage Patterns ☒ Buttressed Trees ☒ Elevated Roots

Other Observations: _____

Representative Wetland Soils:

☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-4	A	10YR 2/2		Loam
4-11	B ₁	2.5Y 4/1	10YR 4/6 C	Sandy loam
11	B ₂	2.5Y 5/1	ncp	Loamy sand

Other Observations: _____

Meets NEIWPCC (2004) Criteria _____

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
 Bedrock _____

Stream # 2 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
 Bedrock _____

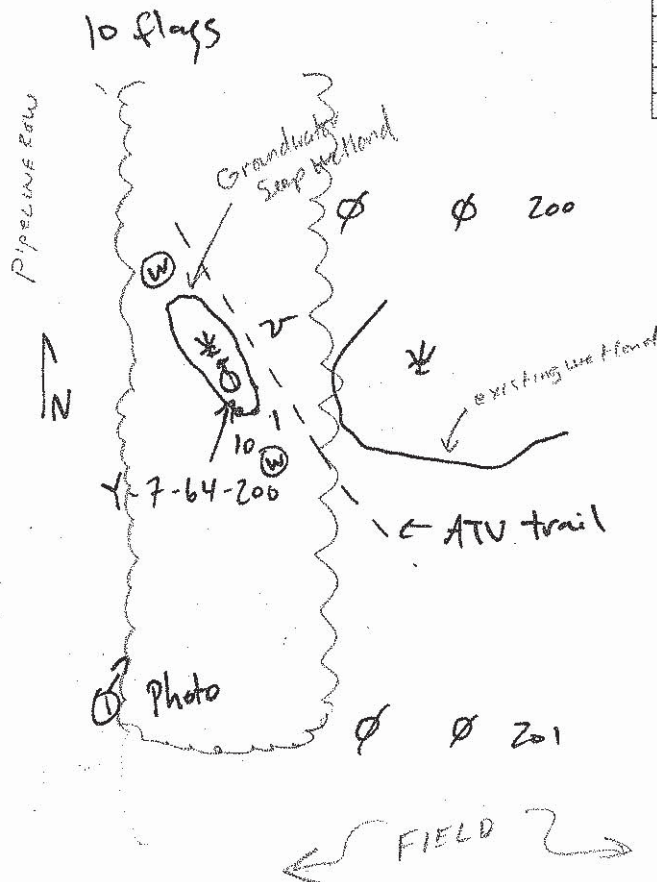
Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP): _____

Notes: narrow drainage parallel to ATV trail
 dug well above & below wetland

☐ Cedar Swamp☐ Wetland of Special Significance

WETLAND SKETCH

Line Flagging Series



Possible Functions and Values:

- ☒ Groundwater Recharge/Discharge
- ☐ Fish and Shellfish Habitat
- ☐ Nutrient Removal
- ☐ Sediment/Shoreline Stabilization
- ☐ Recreation
- ☐ Uniqueness/Heritage
- ☐ Endangered Species Habitat
- ☐ Floodflow Alteration
- ☐ Sediment/Toxicant Retention
- ☐ Production Export
- ☐ Wildlife Habitat
- ☐ Educational/Scientific Value
- ☐ Visual Quality/Aesthetics
- ☐ Other

Checklist:

- ☐ Wetland ID# Y-7-64-200
- ☐ North arrow.
- ☐ Detailed sketch of wetland boundary and flagging sequence.
- ☐ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☐ Photo locations.
- ☐ Location of important wildlife sign.

**Non-WOSS
Data Form Examples**

Segment 5

Maine Power Reliability Project WETLAND SUMMARY FORM

Team A

Observers: DWP, CSD, KTW Date: 10-10-07
 Town: WINDSOR Series: 1-7
 Segment #: 11 CMP Section #: 392 CMP Pole #: 212 Wetland ID #: 1
 Stream/Waterbody ID: 65 Corps plot: Yes ☒ No

Dominant NWI Class: PSS1

Other NWI Classes:

Representative Wetland Vegetation (by Strata): HERBACEOUS:
SHRUB: Vib. recog. Ranun. sp. ONOC. sens.
Spiraea lat. Aster umbell.
Alnus inc. Symphio. lance.
Cornus stolon. Lyco. unif.

Representative Wetland Hydrology

 Permanently Flooded Seasonally Flooded ☒ Saturated
 (approximate depth -) (approximate depth -)

Hydrologic Indicators: Silt Deposition Water-Stained Leaves
 Water Marks Drift Lines Surface Scouring
 Drainage Patterns Buttressed Trees Elevated Roots
 Other Observations: OLD PLOWED FIELD; ERODED

Representative Wetland Soils:
☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-9"	Ap	10YR 4/2	C, F, P	SIL
9-20"+	Bc	2.5Y 5/2	M, F, P	SICL

Other Observations: VI ERODED SCANTY
 Meets NEIWPCC (2004) Criteria

Stream # 1 Data:
 Width (Bank-Bank): Depth @ Center: Peren. Intermittent
 Bank Configuration: Undercut Vertical Gradual
 Channel Substrate: Peat-Muck Silt-Mud Sand Gravel/Cobble Boulder Bedrock

Stream # 2 Data
 Width (Bank-Bank): Depth @ Center: Peren. Intermittent
 Bank Configuration: Undercut Vertical Gradual
 Channel Substrate: Peat-Muck Silt-Mud Sand Gravel/Cobble Boulder Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

Notes:

☐ Cedar Swamp

☐ Wetland of Special Significance

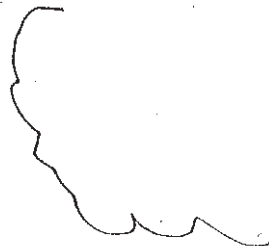
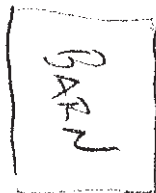
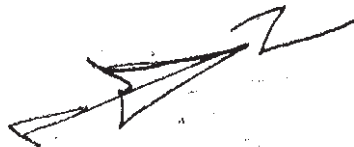
Photo # 1

WETLAND SKETCH

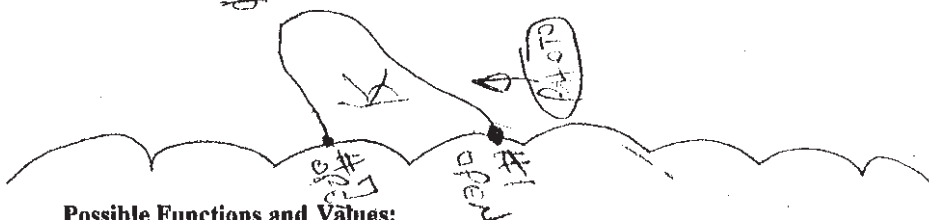
DORION

Line Flagging Series

1-7



212



Possible Functions and Values:

- | | |
|---|---|
| <input type="checkbox"/> Groundwater Recharge/Discharge | <input type="checkbox"/> Floodflow Alteration |
| <input type="checkbox"/> Fish and Shellfish Habitat | <input type="checkbox"/> Sediment/Toxicant Retention |
| <input type="checkbox"/> Nutrient Removal | <input type="checkbox"/> Production Export |
| <input type="checkbox"/> Sediment/Shoreline Stabilization | <input checked="" type="checkbox"/> Wildlife Habitat |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Educational/Scientific Value |
| <input type="checkbox"/> Uniqueness/Heritage | <input type="checkbox"/> Visual Quality/Aesthetics |
| <input type="checkbox"/> Endangered Species Habitat | <input type="checkbox"/> Other |

Checklist:

- ☒ Wetland ID# A11-392-212-1
- ☒ North arrow.
- ☐ Detailed sketch of wetland boundary and flagging sequence.
- ☐ Natural and man-made features – roads, culverts, outcrops, structures, etc.
- ☐ Photo locations.
- ☐ Location of important wildlife sign.

Maine Power Reliability Project WETLAND SUMMARY FORM

Team A

Observers: DWP, CCD, KTW Date: 10-10-07
Town: WINDSOR Series: 1-6, 7-13
Segment #: 11 CMP Section #: 392 CMP Pole #: 210 Wetland #: 1
Stream/Waterbody ID: Ø Corps plot: Yes ☒ No

Dominant NWI Class: PEM1

Other NWI Classes: PSS1

SHRUBS: Representative Wetland Vegetation (by Strata): HERBACEOUS:
Alnus inc. Thely. pal. Typha lat.
Spiraea lat. Onoc. sens. Carex stricta
Ilex vert. Cal. can. Gly. can.
Spiraea tomen. Senecio schweinit. Carex las.

Representative Wetland Hydrology

☐ Permanently Flooded ☐ Seasonally Flooded ☒ Saturated
(approximate depth -) (approximate depth -)

Hydrologic Indicators: ☐ Silt Deposition ☐ Water-Stained Leaves
☐ Water Marks ☐ Drift Lines ☐ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots

Other Observations:

Representative Wetland Soils:

☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-3"	A ₁ -MUCK	10YR 3/2	C, F, P	SIL-MUCK
3-9	B ₉₁	10YR 4/1	↓	SIL
9-18"	B ₉₂	2.5Y 5/2	A, M, P, F	↓
			C, M, F	↓

Other Observations:

Meets NEIWPCC (2004) Criteria I Scant silt loam

Stream #1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
_____ Bedrock

Stream #2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
_____ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

Notes:

ATV RUTS PREVALENT;
VERY DISTURBED.

☐ Cedar Swamp

☐ Wetland of Special Significance

Photo # 2

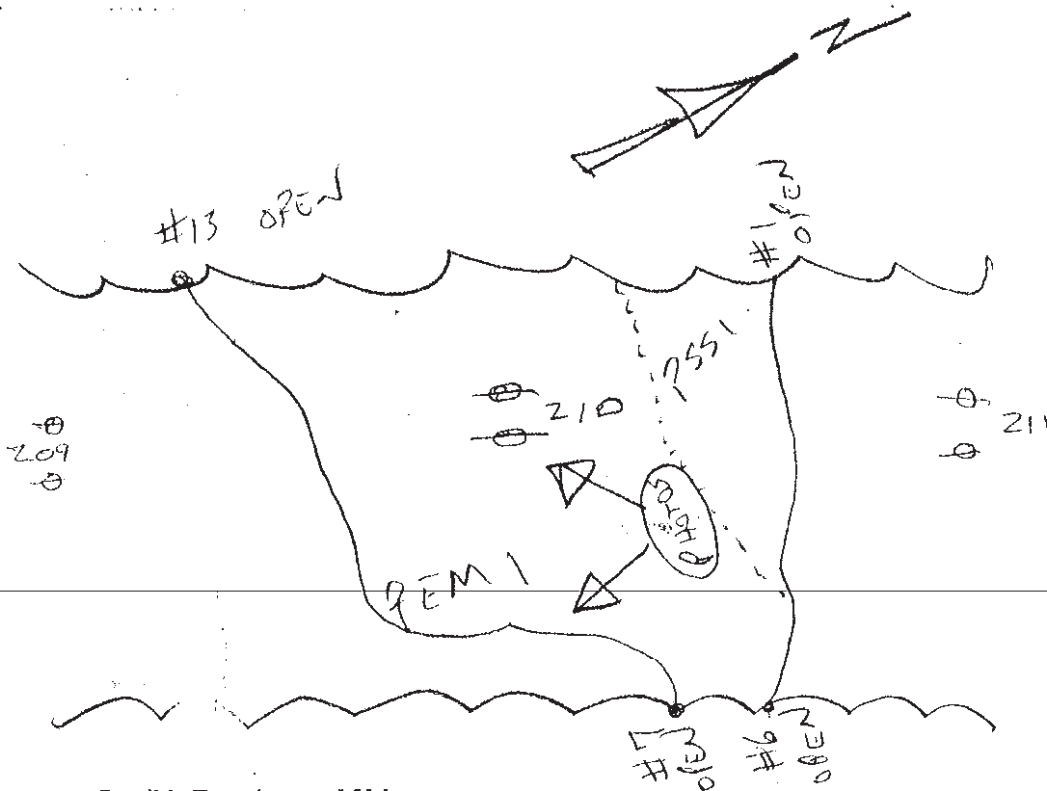
WETLAND SKETCH

Derion
11

Line Flagging Series

1-6

7-13



Possible Functions and Values:

- | | |
|---|---|
| <input type="checkbox"/> Groundwater Recharge/Discharge | <input type="checkbox"/> Floodflow Alteration |
| <input type="checkbox"/> Fish and Shellfish Habitat | <input type="checkbox"/> Sediment/Toxicant Retention |
| <input type="checkbox"/> Nutrient Removal | <input type="checkbox"/> Production Export |
| <input type="checkbox"/> Sediment/Shoreline Stabilization | <input checked="" type="checkbox"/> Wildlife Habitat |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Educational/Scientific Value |
| <input type="checkbox"/> Uniqueness/Heritage | <input type="checkbox"/> Visual Quality/Aesthetics |
| <input type="checkbox"/> Endangered Species Habitat | <input type="checkbox"/> Other |

Checklist:

- ☒ Wetland ID# A11-392-210-1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features – roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☒ Location of important wildlife sign.

Maine Power Reliability Project

Team A

WETLAND SUMMARY FORM

Observers: DWP, CDD, KTW Date: 10-16-07
 Town: WHITEFIELD Series: 1-6
 Segment #: 11 CMP Section #: 392 CMP Pole #: 141 Wetland ID #: 1
 Stream/Waterbody ID: 0 Corps plot: Yes ☒ No

Dominant NWI Class: PEM1

Other NWI Classes:

HERB:

Representative Wetland Vegetation (by Strata):

Viola spp. Gly. melic. Symphio. lance.
Carex scap. Salix sp. Ranun. spp.
Lycos. unif. Agrostis sp. Phal. arund.
Gallium palus. Carex lurid.

Representative Wetland Hydrology

☐ Permanently Flooded (approximate depth -) ☐ Seasonally Flooded (approximate depth -) ☒ Saturated

Hydrologic Indicators: ☐ Silt Deposition ☐ Water-Stained Leaves
☐ Water Marks ☐ Drift Lines ☐ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots

Other Observations: GENTLE SWALE DRAINING GOLF COURSE

Representative Wetland Soils:

☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-4 in.	AP	10YR 9/2	M, F, P	SIL
4-10	Bg1	2.5Y 3/1	✓	✓
10-16" +	Bg2	2.5Y 5/2	M, M, P	SICC

Other Observations:
 Meets NEIWPCC (2004) Criteria VI

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
 _____ Bedrock

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
 _____ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

Notes:

☐ Cedar Swamp

☐ Wetland of Special Significance

WETLAND SKETCH

Durham

#1 CONNECTS TO #6

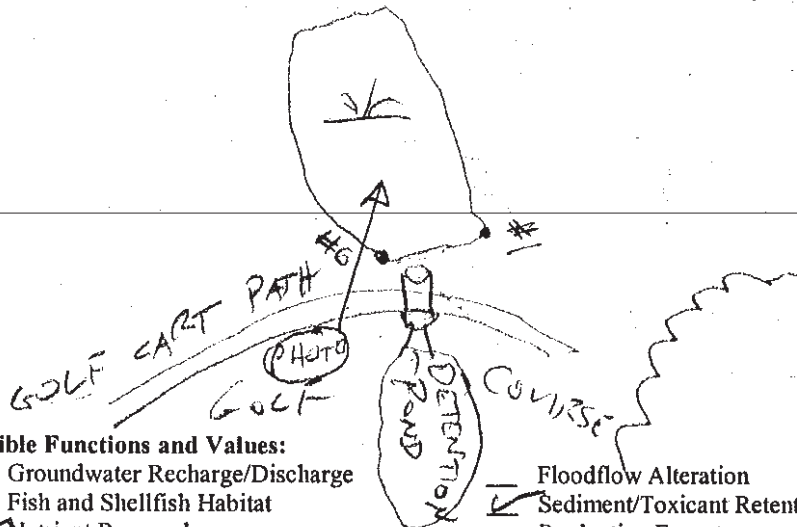
Line Flagging Series
1-6



POLE
140
p
p

HAY LAND

PHILIPSTON LANE
POLE 141
p
p



Possible Functions and Values:

- | | |
|---|---|
| <input type="checkbox"/> Groundwater Recharge/Discharge | <input type="checkbox"/> Floodflow Alteration |
| <input type="checkbox"/> Fish and Shellfish Habitat | <input checked="" type="checkbox"/> Sediment/Toxicant Retention |
| <input checked="" type="checkbox"/> Nutrient Removal | <input type="checkbox"/> Production Export |
| <input type="checkbox"/> Sediment/Shoreline Stabilization | <input checked="" type="checkbox"/> Wildlife Habitat |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Educational/Scientific Value |
| <input type="checkbox"/> Uniqueness/Heritage | <input type="checkbox"/> Visual Quality/Aesthetics |
| <input type="checkbox"/> Endangered Species Habitat | <input type="checkbox"/> Other |

Checklist:

- Wetland ID# A11-392-141-1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features – roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☒ Location of important wildlife sign.

Field Data Form

Routine Wetland Field Data Form

Routine Wetland Field Data Form

 ROYCE
ASSOCIATES

Date: 4/12/17	Project Name: Q M I	Project Name:
Job #: E32	Cowardin Class(es) & %: PFD 1/H E	Cowardin Class(es) & %:
Observers: SPB, SNH	Photo(s) #: 2	Photo(s) #:
Comments:		Comments:

Dominant Vegetation (by stratum):		Non-dominant Vegetation (by stratum):	
Herbs	Herbs (cont.)	Shrubs/Saplings	Trees
QMD SENS		Abi bal	Acer rub
OSM Cinn		Bet pen	Abies bal
Acer rub			Bet pen
Cor CFI			
DY Cor			
Sphagnum			

Wetland Hydrology Indicators:

Perch. Flooded ☒ Seasonally Flooded/Saturated ☒ Saturated ☒
 (approx. depth:) (approx. depth: 3")

*A1 - Surface water	*B5 - Iron deposits	*B15 - Marl deposits	*C7 - Thin muck surface
*A2 - High water table	B6 - Surface soil cracks	B16 - Moss trim lines	C8 - Crayfish burrows
*A3 - Saturation	*B7 - Inundated aerial imagery	*C1 - Hydrogen sulfide odor	C9 - Saturation visible on aerial imagery
*B1 - Water marks	*B8 - Sparse veg. concave surface	C2 - Dry-season water table	*D1 - Stunted or stressed plants
*B2 - Sediment deposits	*B9 - Water-stained leaves	*C3 - Oxidized rhizospheres - living root	*D2 - Geomorphic position
*B3 - Drift deposits	B10 - Drainage patterns	*C4 - Presence of reduced iron	*D3 - Shallow aquitard
*B4 - Algal mat or crust	*B13 - Aquatic fauna	*C6 - Recent iron reduction in tilled soils	*D4 - Microtopographic relief
*Denotes Primary Indicator			*D5-FAC-neutral test

Representative Hydric Soils:

Depth (in)	Horizon	Texture	Color	Redox. Features	Other
0-15	A	LS	10YR/6/1	2.5Y/6/8 70%	

Hydric Soil Indicator & Reference:

Other Soil Comments:

**Non-WOSS
Data Form Example
Merrill Road Converter Station**

Date: 4/30/17	Project Name: QMI
Job #: 532	Cowardin Class(es) & %: PFO 1/4 E
Observers: J. Boyle, C. Hink	Photo(s) #: 2
Comments:	

Dominant Vegetation (by stratum):

Herbs	Herbs (cont.)	Shrubs/Saplings	Trees	Vines
Abi bal		Abi bal	Era nig	
Sphagnum		Flax nigra	Abi bal	
			Ace rub	

Wetland Hydrology Indicators:

___ Perm. Flooded (approx. depth:) ☒ Seasonally Flooded/Saturated (approx. depth: 8") ___ Saturated

*A1 - Surface water	*B5 - Iron deposits	*B15 - Marl deposits	*C7 - Thin muck surface
*A2 - High water table	B6 - Surface soil cracks	B16 - Moss trim lines	C8 - Crayfish burrows
*A3 - Saturation	*B7 - Inundated aerial imagery	*C1 - Hydrogen sulfide odor	C9 - Saturation visible on aerial imagery
*B1 - Water marks	*B8 - Sparse veg. concave surface	C2 - Dry-season water table	*D1 - Stunted or stressed plants
*B2 - Sediment deposits	*B9 - Water-stained leaves	*C3 - Oxidized rhizospheres - living root	*D2 - Geomorphic position
*B3 - Drift deposits	B10 - Drainage patterns	*C4 - Presence of reduced iron	*D3 - Shallow aquitard
*B4 - Algal mat or crust	*B13 - Aquatic fauna	*C6 - Recent iron reduction in tilled soils	*D4 - Microtopographic relief
*Denotes Primary Indicator			*D5-FAC-neutral test

Representative Hydric Soils:

Depth (in)	Horizon	Texture	Color	Redox. Features	Other
0-8+	0	F.bric	Blk	-	-

Hydric Soil Indicator & Reference:

Other Soil Comments:

Histic epi.

Exhibit C: WOSS Data Form Examples

WOSS
Data Form Examples
Segment 1

**MREI
WETLAND SUMMARY FORM 2015**

Observers: CRP/BGP Date: 7/22/2015
 Town: Brace Street Twp. Map #: 22
 Wetland ID: 24-10(41-39) (mile segment - wetland #)
 Stream/Waterbody Name: Bitterbrook Corps plot: Yes ☒ No ☐
 Dominant NWI Class: PSS4 Other NWI Classes: PFO4

Representative Wetland Vegetation:

ALN INC
 DIC MAR
 RHO CAN
 MYR GAL
 SPI LAT
 CAR LAC
 LAR LAR

(Ford across stream
 along N edge of ROW)

Representative Wetland Hydrology

☒ Surface Water (approximate depth - 18) ☒ High Water Table (approximate depth - 0) ☒ Saturated (approximate depth - 0)

Hydrologic Indicators: ☐ Sediment Deposits ☐ Water-Stained Leaves
☐ Water Marks ☐ Drift Deposits ☐ Thin Muck Surface
☐ Algal Mat or Crust ☐ Hydrogen Sulfide Odor ☐ Oxidized Rhizospheres on Living Roots
 Other Observations:

Representative Wetland Soils:

☐ Mineral
☒ Organic

Hshyq
Epipedon
Lhsbed

Depth	Horizon	Color	Redox Features	Texture

Other Observations:

Meets Army Corps NE-NC Regional Supplement Criteria

Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, etc.)

Invasive Species: Yes ☐ No ☒
 Notes:

WOSS: Yes ☒ No ☐
 Type:

stream WWBlt

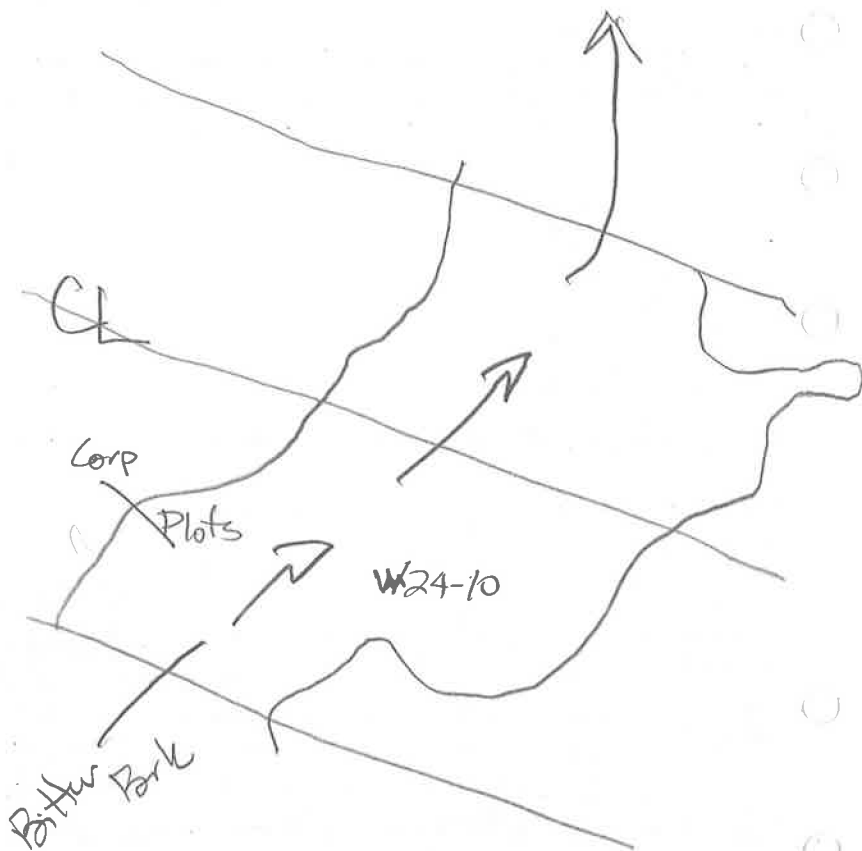
General Notes:

Photo# @15 west 33 west

SKETCH ON BACK

WETLAND SKETCH

North Arrow:



MREI
WETLAND SUMMARY FORM 2015

Observers: MB-CP-km Date: 7/2/15
 Town: _____ Map #: 31
 Wetland ID: WET-33-7 (mile segment - wetland #)
 Stream/Waterbody Name: _____ Corps plot: Yes No ☒
 Dominant NWI Class: PEN/PFO4 Other NWI Classes: _____
 Representative Wetland Vegetation: _____

Trees: B. Fir
 Shrub: B. Fir (regen)
 Herbs: Cinn. Fern
 Cal. Gun
 Carex gymnodora
 Bunchberry
 E. Wood Fern
 Goldthread

Representative Wetland Hydrology

Surface Water (approximate depth -) ☒ High Water Table (approximate depth - 4") ☒ Saturated Surface (approximate depth -)
 Hydrologic Indicators: _____ Sediment Deposits _____ Water-Stained Leaves
 _____ Water Marks _____ Drift Deposits _____ Thin Muck Surface
 _____ Algal Mat or Crust ☒ Hydrogen Sulfide Odor _____ Oxidized Rhizospheres on Living Roots
 Other Observations: _____

Representative Wetland Soils:

☒ Mineral
☒ Organic

Depth	Horizon	Color	Redox Features	Texture
0-2	10G2	10Y2.2/2		
2-12+	Bg	10Y2.6/1	C/D	SIL

Other Observations: _____

Meets Army Corps NE-NC Regional Supplement Criteria

Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, etc.)

Invasive Species: Yes No ☒
 Notes: _____

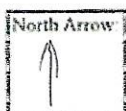
WOSS: Yes ☒ No ☒
 Type: _____

General Notes: _____

Photo# _____

SKETCH ON BACK

WETLAND SKETCH



MREI																													
WETLAND SUMMARY FORM 2015																													
Observers: <u>HSW, JPB, SNH</u>		Date: <u>6/4/2015</u>																											
Town: <u>West Forks</u>		Map: _____																											
Wetland ID: <u>WET-48-08</u> (mile segment - wetland #)																													
Stream/Waterbody Name: _____		Corps Plot: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X																											
Dominant NWI Class: <u>PSS</u> Other NWI Classes: _____																													
Representative Wetland Vegetation																													
<u>Tree</u> Clear cut area within last 5 yrs	<u>S/S</u> Rubus idaeus	<u>Herb</u> Eliochris Onoclea sensibilis Solidago sp																											
Representative Wetland Hydrology																													
<input checked="" type="checkbox"/> Surface Water (Approximate Depth 2')		<input checked="" type="checkbox"/> High Water Table (Approximate Depth Surface)		<input checked="" type="checkbox"/> Saturated (Approximate Depth Surface)																									
Hydraulic Indicators: <input type="checkbox"/> Water Marks <input type="checkbox"/> Algal Mat or Crust		<input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drift Deposits <input type="checkbox"/> Hydrogen Sulfide Odor		<input type="checkbox"/> Water Stained Leaves <input type="checkbox"/> Thin Muck Surface <input type="checkbox"/> Oxidized Rhizospheres on Living Roots																									
Other Observations: _____																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Representative Wetland Soils</th> <th style="width: 10%;">Depth</th> <th style="width: 10%;">Horizon</th> <th style="width: 10%;">Color</th> <th style="width: 10%;">Redox Features</th> <th style="width: 10%;">Texture</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/> Mineral</td> <td>0-2"</td> <td>A</td> <td>10YR3/1</td> <td>N/A</td> <td>SiL</td> </tr> <tr> <td><input type="checkbox"/> Organic</td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>						Representative Wetland Soils	Depth	Horizon	Color	Redox Features	Texture	<input checked="" type="checkbox"/> Mineral	0-2"	A	10YR3/1	N/A	SiL	<input type="checkbox"/> Organic											
Representative Wetland Soils	Depth	Horizon	Color	Redox Features	Texture																								
<input checked="" type="checkbox"/> Mineral	0-2"	A	10YR3/1	N/A	SiL																								
<input type="checkbox"/> Organic																													
Other Observations: Rock refusal at 2"																													
Meets Army Corps NE-NC regional Supplemental Criteria <input checked="" type="checkbox"/>																													
Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, etc.) At least 16 SSEMs; 100's of WF tadpoles, moose droppings, moose rubs, green/bull frog																													
Invasive Species: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X																													
Notes: _____																													
WOSS: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																													
Type _____																													
General Notes: _____																													
Photo # 4 _____																													
SKETCH ON BACK																													

WOSS
Data Form Examples
Segment 2

MREI WETLAND SUMMARY FORM 2015			
Observers:	<u>JPB</u>	Date:	<u>8/12/2015</u>
Town:	<u>West Forks</u>	Map:	<u></u>
Wetland ID:	<u>WET-54-1</u> (mile segment - wetland #)		
Stream/Waterbody Name:	<u></u>	Corps Plot:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X
Dominant NWI Class:	<u>PFO1/4E</u>	Other NWI Classes:	<u>PSS</u>
Representative Wetland Vegetation			
<u>Tree</u>	<u>S/S</u>	<u>Herb</u>	
Thuja occidentalis	Alnus incana	Phalaris arundinacea	
Fraxinus nigra	Cornus so	Carex crinita	
Betula alleghaniensis	Thuja occidentalis	Osmunda claytoniana	
Acer rubrum	Acer rubrum	Solidago sp	
Abies balsamea	Spiraea tomentosa	Equisetum sp	
		Onoclea sensibilis	
Representative Wetland Hydrology			
<input checked="" type="checkbox"/> Surface Water	<input checked="" type="checkbox"/> High Water Table	<input checked="" type="checkbox"/> Saturated	
(Approximate Depth 3")	(Approximate Depth 0")	(Approximate Depth 0)	
Hydraulic Indicators:	<input checked="" type="checkbox"/> Sediment Deposits	<input checked="" type="checkbox"/> Water Stained Leaves	
<input type="checkbox"/> Water Marks	<input type="checkbox"/> Drift Deposits	<input type="checkbox"/> Thin Muck Surface	
<input type="checkbox"/> Algal Mat or Crust	<input type="checkbox"/> Hydrogen Sulfide Odor	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots	
Other Observations:			
Representative Wetland Soils	Depth	Horizon	Color
<input checked="" type="checkbox"/> Mineral	0-2"	A	10YR3/2
<input type="checkbox"/> Organic	2-5"	B	10YR6/1
Other Observations: Rock refusal at 5"			
Meets Army Corps NE-NC regional Supplemental Criteria <input checked="" type="checkbox"/> X			
Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, etc.)			
Invasive Species: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X			
Notes:			
WOSS: Yes <input checked="" type="checkbox"/> X No <input type="checkbox"/>			
Type Adjacent to stream			
General Notes:			
PSS within cleared ROW			
Photo # 2 <u></u> SKETCH ON BACK			

AN

~~172~~

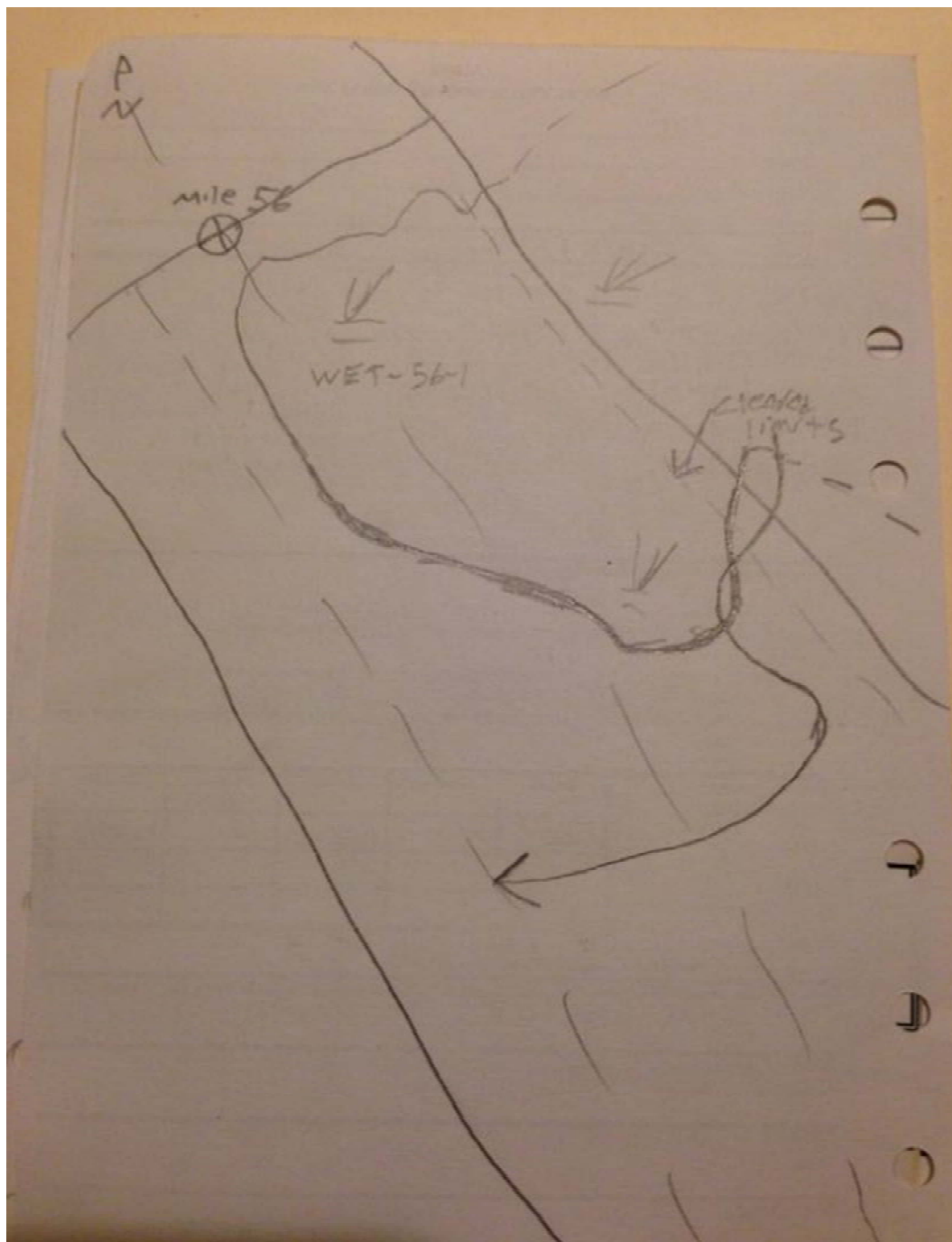
WET-2-1

ASTR-54-1

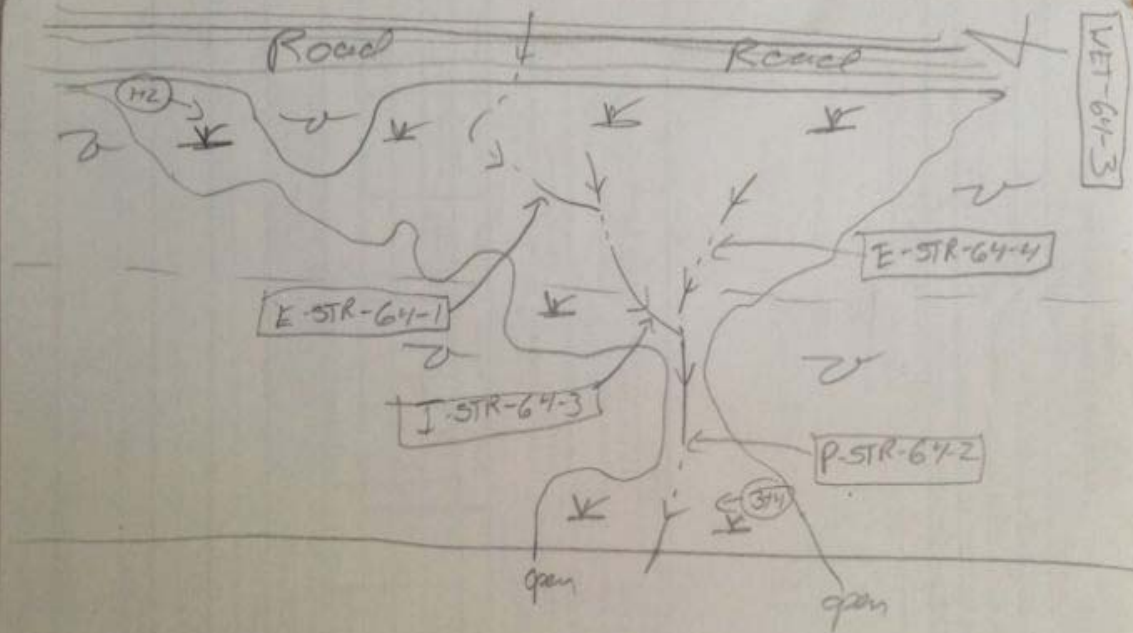
14

, etc

MREI WETLAND SUMMARY FORM 2015					
Observers: <u>JPB</u>		Date: <u>8/18/2015</u>			
Town: <u>West Forks</u>		Map: _____			
Wetland ID: <u>WET-56-1</u> (mile segment - wetland #)					
Stream/Waterbody Name: _____		Corps Plot: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X			
Dominant NWI Class: <u>PFO1/4</u>		Other NWI Classes: <u>PEM</u>			
Representative Wetland Vegetation					
<u>Tree</u> Fraxinus nigra Acer rubrum Abies balsamea Betula alleghaniensis	<u>S/S</u> Fraxinus nigra Betula alleghaniensis Acer rubrum	<u>Herb</u> Phalaris arundinacea Onoclea sensibilis Osmunda cinnamomeum Glyceria canadensis Solidago sp Carex crinita Cephalanthus occidentalis			
Representative Wetland Hydrology					
<input checked="" type="checkbox"/> Surface Water (Approximate Depth <u>1"</u>)		<input checked="" type="checkbox"/> High Water Table (Approximate Depth <u>0</u>)		<input checked="" type="checkbox"/> Saturated (Approximate Depth <u>0</u>)	
Hydraulic Indicators: <input type="checkbox"/> Sediment Deposits		<input checked="" type="checkbox"/> Water Stained Leaves			
<input type="checkbox"/> Water Marks		<input type="checkbox"/> Thin Muck Surface			
<input type="checkbox"/> Algal Mat or Crust		<input type="checkbox"/> Oxidized Rhizospheres on Living Roots			
Other Observations: <u>Drainage patterns</u>					
Representative Wetland Soils	Depth	Horizon	Color	Redox Features	Texture
<input type="checkbox"/> Mineral	0-3"	O	Black	N/A	Hemic
<input checked="" type="checkbox"/> Organic					
Other Observations: <u>Rock refusal at 3"</u>					
Meets Army Corps NE-NC regional Supplemental Criteria <input checked="" type="checkbox"/> X					
Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, etc.)					
Invasive Species: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X					
Notes:					
WOSS: Yes <input checked="" type="checkbox"/> X No <input type="checkbox"/>					
Type <u>Within 250' of Moxie Pond</u>					
General Notes:					
Photo # <u>2</u> SKETCH ON BACK					



MREI WETLAND SUMMARY FORM 2015					
Observers: <u>SNH, LKH</u>		Date: <u>9/16/2015</u>			
Town: <u>Bald Mountain Twp T2 R3</u>		Map: <u>58</u>			
Wetland ID: <u>WET-64-3</u> (mile segment - wetland #)					
Stream/Waterbody Name: <u> </u>		Corps Plot: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X			
Dominant NWI Class: <u>PFO4E</u> Other NWI Classes: <u> </u>					
Representative Wetland Vegetation					
<u>Tree</u> Abies balsamea Thuja occidentalis	<u>S/S</u> Spirea alba Alnus incana	<u>Herb</u> Carex trisperma Juncus alpinoarticulatus Phalaris arundinacea Glyceria canadense Sphagnum			
Representative Wetland Hydrology					
<input type="checkbox"/> Surface Water		<input checked="" type="checkbox"/> High Water Table		<input checked="" type="checkbox"/> Saturated	
(Approximate Depth)		(Approximate Depth 2")		(Approximate Depth surface)	
Hydraulic Indicators:		<input type="checkbox"/> Sediment Deposits		<input type="checkbox"/> Water Stained Leaves	
<input type="checkbox"/> Water Marks		<input type="checkbox"/> Drift Deposits		<input type="checkbox"/> Thin Muck Surface	
<input checked="" type="checkbox"/> Algal Mat or Crust		<input type="checkbox"/> Hydrogen Sulfide Odor		<input type="checkbox"/> Oxidized Rhizospheres on Living Roots	
Other Observations: Rivulets					
Representative Wetland Soils <input type="checkbox"/> Mineral <input checked="" type="checkbox"/> Organic	Depth 0-14" RR	Horizon O RR	Color 10YR2/2 RR	Redox Features N/A RR	Texture Hemic RR
Other Observations:					
Meets Army Corps NE-NC regional Supplemental Criteria <input checked="" type="checkbox"/> X					
Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, etc.)					
Moose sign/bear sign					
Invasive Species: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X					
Notes:					
WOSS: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
Type					
General Notes:					
Within transmission lines Right of Way, flags pulled along road					
Photo # 4					
SKETCH ON BACK					



MREI WETLAND SUMMARY FORM 2015					
Observers: <u>SNH, LKH</u>		Date: <u>9/16/2015</u>			
Town: <u>Bald Mountain Twp T2 R3</u>		Map: <u>58</u>			
Wetland ID: <u>WET-64-6</u> (mile segment - wetland #)					
Stream/Waterbody Name: <u> </u>		Corps Plot: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X <input type="checkbox"/>			
Dominant NWI Class: <u>PSS4E</u>		Other NWI Classes: <u> </u>			
Representative Wetland Vegetation					
<u>Tree</u>	<u>S/S</u> Picea mariana Alnus incana Spirea alba	<u>Herb</u> Juncus effusus Barber pole rush? Carex trisperma			
Representative Wetland Hydrology					
<input checked="" type="checkbox"/> Surface Water (Approximate Depth)		<input checked="" type="checkbox"/> High Water Table (Approximate Depth 2")		<input checked="" type="checkbox"/> Saturated (Approximate Depth surface)	
Hydraulic Indicators: <input type="checkbox"/> Sediment Deposits		<input checked="" type="checkbox"/> Water Stained Leaves			
<input type="checkbox"/> Water Marks		<input type="checkbox"/> Thin Muck Surface			
<input type="checkbox"/> Algal Mat or Crust		<input checked="" type="checkbox"/> Hydrogen Sulfide Odor			
		<input type="checkbox"/> Oxidized Rhizospheres on Living Roots			
Other Observations: Rivulets					
Representative Wetland Soils <input checked="" type="checkbox"/> Mineral <input type="checkbox"/> Organic		Depth 0-8" 8-14" RR	Horizon O A	Color 10YR2/2 10YR4/1	Redox Features N/A N/A
		Texture Sap L			
Other Observations:					
Meets Army Corps NE-NC regional Supplemental Criteria <input checked="" type="checkbox"/> X <input type="checkbox"/>					
Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, etc.)					
Moose sign					
Invasive Species: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X <input type="checkbox"/>					
Notes:					
WOSS: Yes <input checked="" type="checkbox"/> X <input type="checkbox"/> No <input type="checkbox"/>					
Type					
General Notes:					
Area outside project corridor has been recently harvested					
Photo # <u>4</u>		SKETCH ON BACK			

MREI
STREAM SUMMARY FORM 2015

Observer: SNH LKH Date: 7/17/15
Town: Cold Mountain Twp Map #: 54
Stream ID: P-STR-64-6 (mile segment - stream #)
Stream/Waterbody Name: _____

Stream Sketch:



Stream Data:
Width (Bank-Bank): 4' Perennial ☒ Intermittent _____ Ephemeral Channel _____
Depth @ Center: 5"
Bank Configuration: _____ Undercut ☒ Vertical _____ Gradual _____
Channel Substrate: ☒ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____
_____ Boulder _____ Bedrock _____

Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, etc.)

Notes:

Flows through culvert between WET-64-6
and
WET-64-5

Photos: 1+2, 3+4

Photo: 1+2

SKETCH ON BACK

MREI WETLAND SUMMARY FORM 2015																									
Observers: <u>SNH, LKH</u>		Date: <u>9/17/2015</u>																							
Town: <u>Bald Mountain Twp T2 R3</u>		Map: <u>58</u>																							
Wetland ID: <u>WET-64-10</u> (mile segment - wetland #)																									
Stream/Waterbody Name: _____ Corps Plot: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X <input type="checkbox"/>																									
Dominant NWI Class: <u>PEM1E</u> Other NWI Classes: <u>PF4E</u>																									
Representative Wetland Vegetation																									
<u>Tree</u> Abies balsamea Picea mariana	<u>S/S</u> Chumnaedaphne calyculatus Spirea alba Picea mariana	<u>Herb</u> Typha latifolia Glyceria canadense Juncus effusus																							
Representative Wetland Hydrology																									
<input checked="" type="checkbox"/> Surface Water (Approximate Depth _____)		<input type="checkbox"/> High Water Table (Approximate Depth _____)		<input checked="" type="checkbox"/> Saturated (Approximate Depth _____ to surface)																					
Hydraulic Indicators: _____ Sediment Deposits _____ Water Stained Leaves _____ _____ Water Marks _____ Drift Deposits _____ Thin Muck Surface _____ _____ Algal Mat or Crust <input checked="" type="checkbox"/> Hydrogen Sulfide Odor _____ Oxidized Rhizospheres on Living Roots _____		Other Observations: Rivulets																							
Representative Wetland Soils <input type="checkbox"/> Mineral <input checked="" type="checkbox"/> Organic		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Depth</th> <th style="padding: 5px;">Horizon</th> <th style="padding: 5px;">Color</th> <th style="padding: 5px;">Redox Features</th> <th style="padding: 5px;">Texture</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">0-30"</td> <td style="padding: 5px;">O</td> <td style="padding: 5px;">10YR2/2</td> <td style="padding: 5px;">N/A</td> <td style="padding: 5px;">Sap</td> </tr> <tr> <td style="height: 20px;"></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="height: 20px;"></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				Depth	Horizon	Color	Redox Features	Texture	0-30"	O	10YR2/2	N/A	Sap										
Depth	Horizon	Color	Redox Features	Texture																					
0-30"	O	10YR2/2	N/A	Sap																					
Other Observations: _____																									
Meets Army Corps NE-NC regional Supplemental Criteria <input checked="" type="checkbox"/> X <input type="checkbox"/>																									
Wildlife Observation/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, etc.)																									
Invasive Species: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> X <input type="checkbox"/>																									
Notes:																									
WOSS: Yes <input checked="" type="checkbox"/> X <input type="checkbox"/> No <input type="checkbox"/>																									
Type Peatland																									
General Notes: Flags pulled near/in sigh of road																									
Photo # <u>4</u> SKETCH ON BACK																									

Routine Wetland Field Data Form

Date: 5/20/17	Project Name: QMI
Job #: 532	Cowardin Class(es) & %: PEM, PSS
Observers: J. Boyle, C. Flinkstein	Photo(s) #: 2
Comments: WOSS (Deer Wintering Area)	

Dominant Vegetation (by stratum):

Herbs	Herbs (cont.)	Shrubs/Saplings	Trees	Vines
Phragmites		Ail. inc.		
Onoclea				
Asplenium				
Ail. inc.				

Wetland Hydrology Indicators:

☐ Perm. Flooded (approx. depth:)
 ☐ Seasonally Flooded/Saturated (approx. depth:)
 ☒ Saturated

*A1 - Surface water	*B5 - Iron deposits	*B15 - Marl deposits	*C7 - Thin muck surface
*A2 - High water table	B6 - Surface soil cracks	B16 - Moss trim lines	C8 - Crayfish burrows
*A3 - Saturation	*B7 - Inundated aerial imagery	*C1 - Hydrogen sulfide odor	C9 - Saturation visible on aerial imagery
*B1 - Water marks	*B8 - Sparse veg. concave surface	C2 - Dry-season water table	*D1 - Stunted or stressed plants
*B2 - Sediment deposits	*B9 - Water-stained leaves	*C3 - Oxidized rhizospheres - living root	*D2 - Geomorphic position
*B3 - Drift deposits	B10 - Drainage patterns	*C4 - Presence of reduced iron	*D3 - Shallow aquitard
*B4 - Algal mat or crust	*B13 - Aquatic fauna	*C6 - Recent iron reduction in tilled soils	*D4 - Microtopographic relief
*Denotes Primary Indicator			*D5-FAC-neutral test

Representative Hydric Soils:

Depth (in)	Horizon	Texture	Color	Redox. Features	Other
0-8	A	loam	sil	-	-
		Rock Refusal at 8"			

Hydric Soil Indicator & Reference:

Other Soil Comments:

WOSS
Data Form Examples
Segment 3

Date: 5.25.17	Project Name: GMI
Job #: 532	Cowardin Class(es) & %: PFO4E(80) (PEM/SS) (20)
Observers: HSN CJF	Photo(s) #:
Comments: cedar swamp	

Dominant Vegetation (by stratum):

Herbs	Herbs (cont.)	Shrubs/Saplings	Trees	Vines
rub pub mud can		thv occ bet all	thv occ bet all	Ø

Wetland Hydrology Indicators:

☐ Perm. Flooded ☐ Seasonally Flooded/Saturated ☒ Saturated
 (approx. depth:) (approx. depth:)

*A1 - Surface water	*B5 - Iron deposits	*B15 - Marl deposits	*C7 - Thin muck surface
*A2 - High water table	B6 - Surface soil cracks	B16 - Moss trim lines	C8 - Crayfish burrows
*A3 - Saturation	*B7 - Inundated aerial imagery	*C1 - Hydrogen sulfide odor	C9 - Saturation visible on aerial imagery
*B1 - Water marks	*B8 - Sparse veg. concave surface	C2 - Dry-season water table	*D1 - Stunted or stressed plants
*B2 - Sediment deposits	*B9 - Water-stained leaves	*C3 - Oxidized rhizospheres - living root	*D2 - Geomorphic position
*B3 - Drift deposits	B10 - Drainage patterns	*C4 - Presence of reduced iron	*D3 - Shallow aquitard
*B4 - Algal mat or crust	*B13 - Aquatic fauna	*C6 - Recent iron reduction in tilled soils	*D4 - Microtopographic relief
*Denotes Primary Indicator			*D5-FAC-neutral test

Representative Hydric Soils:

Depth (in)	Horizon	Texture	Color	Redox. Features	Other
0-16+	1	org	black	—	

Hydric Soil Indicator & Reference:

Other Soil Comments:

A1 Nat'l Ind.

Functions & Values: place an * next to primary f&v & circle all that apply
☐ Groundwater Recharge/Discharge ☐ Floodwater Alteration ☐ Fish & Shellfish Habitat
☐ Sed./Tox./Pathogen Retention ☐ Nutrient R/R/T ☒ Production Export
☒ Sediment/Shoreline Stabilization ☒ Wildlife Habitat ☒ Recreation
☐ Educational/Scientific Value ☐ Uniqueness/Heritage ☐ Visual Quality/Aesthetics
☐ RTE Habitat

GPS Tech: CJF GPS File:

Stream Data:

Stream Name: 1-STR-95-2 Wetland: no wetland

☒ wetland: 95-5

Max Width: 36" Max Depth: 6" Per: Int: ☒

Bank Type: vertical gradual ☒ undercut other:

Substrate (>30%): ☒ mud gravel sand bedrock ☒ rock
 peat/muck

Stream Name: 1-STR-95-1 Wetland: no wetland

☒ wetland: 95-5

Max Width: 36" Max Depth: 6" Per: Int: ☒

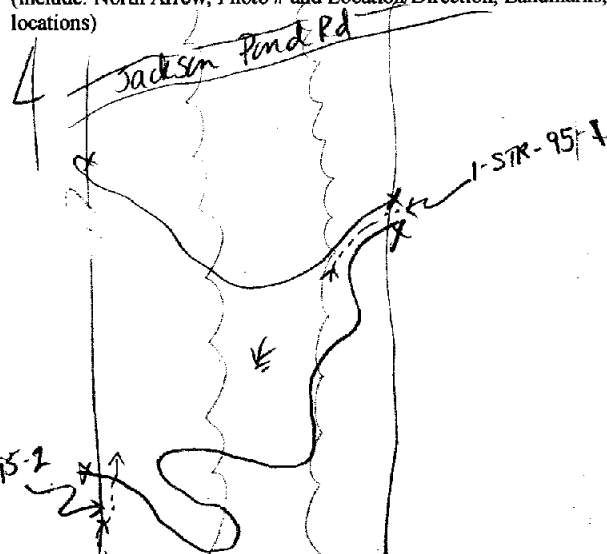
Bank Type: vertical gradual ☒ undercut other:

Substrate (>30%): ☒ mud ☒ gravel sand bedrock ☒ rock
 peat/muck

Notes:

SKETCH: wetland (&) stream ID:

(include: North Arrow, Photo # and Location/Direction, Landmarks, Flag locations)



WET-100-05

Maine Power Reliability Project

Team F

WETLAND SUMMARY FORM

Observers: GE, KF Date: 10-4-07
 Town: Starks Series: 1-43
 Segment #: 12 CMP Section #: 68 CMP Pole #: 336 Wetland ID #: 1
 Stream/Waterbody ID: _____ Corps plot: Yes ☒ No
 Dominant NWI Class: PFOI/4 - PEM1 Other NWI Classes: PSS1

Representative Wetland Vegetation (by Strata):

Gray Birch (T.Sap) Cal. can Rough awns
 Acer rubr (T.Sap) Ostrich fern Fan flower
 Sen. wdg. NY fern
 Ostr. fern Hemlock (Sap)

Representative Wetland Hydrology

☐ Permanently Flooded ☒ Seasonally Flooded ☐ Saturated
 (approximate depth -) (approximate depth -)

Hydrologic Indicators: ☐ Silt Deposition ☐ Water-Stained Leaves
☐ Water Marks ☐ Drift Lines ☒ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots
 Other Observations:

Representative Wetland Soils:

☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-3	A	5Y2-5/1	—	SaLo
3-10	Bw1	5Y5/2	2.5Y4/4	SaLo
10-15+	Bw2	5Y-5/2	" "	CoLoSa

Other Observations:

Meets NEIWPCC (2004) Criteria VI >10% redox

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. ☐ Intermittent ☐
 Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
 Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Stream # 2 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. ☐ Intermittent ☐
 Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
 Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

Notes:

Couple of spring seeps disappear into W. W. is in natural drainage way. W. drains to NW

☐ Cedar Swamp

☐ Wetland of Special Significance

Photo # 1 (Flog), 2, 3

SKETCH ON BACK

73-2
 5/16/17
 HSN
 checked
 veg/soils/hydro
 good ✓

Maine Power Reliability Project

Team F

WETLAND SUMMARY FORM

Observers: GE, KF Date: 10-4-07
 Town: Starks Series: -43
 Segment #: 12 CMP Section #: 68 CMP Pole #: 336 Wetland ID #: 1
 Stream/Waterbody ID: _____ Corps plot: Yes ☒ No

Dominant NWI Class: PFOI/4 - PEM1 Other NWI Classes: PSS1

Representative Wetland Vegetation (by Strata):

Gray birch (TSap) Cal can Rough aspen
 Acer rub (TSap) Ostrich fern Fern flower
 Sen. wulq. NY fern
 Omo send. Hemlock (Sap)

Representative Wetland Hydrology

☐ Permanently Flooded ☒ Seasonally Flooded ☐ Saturated
 (approximate depth -) (approximate depth -)

Hydrologic Indicators: ☐ Silt Deposition ☐ Water-Stained Leaves
☐ Water Marks ☐ Drift Lines ☒ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots

Other Observations:

Representative
Wetland Soils:
☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-3	A	5Y2.5/1	—	SaLo
3-10	Bw1	5Y5/2	2.5Y4/4	SaLo
10-15+	Bw2	5Y5/2	" "	CoLoSa

Other Observations:

Meets NEIWPCC (2004) Criteria

VI

>10% redox

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. ☐ Intermittent ☐
 Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
 Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. ☐ Intermittent ☐
 Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
 Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

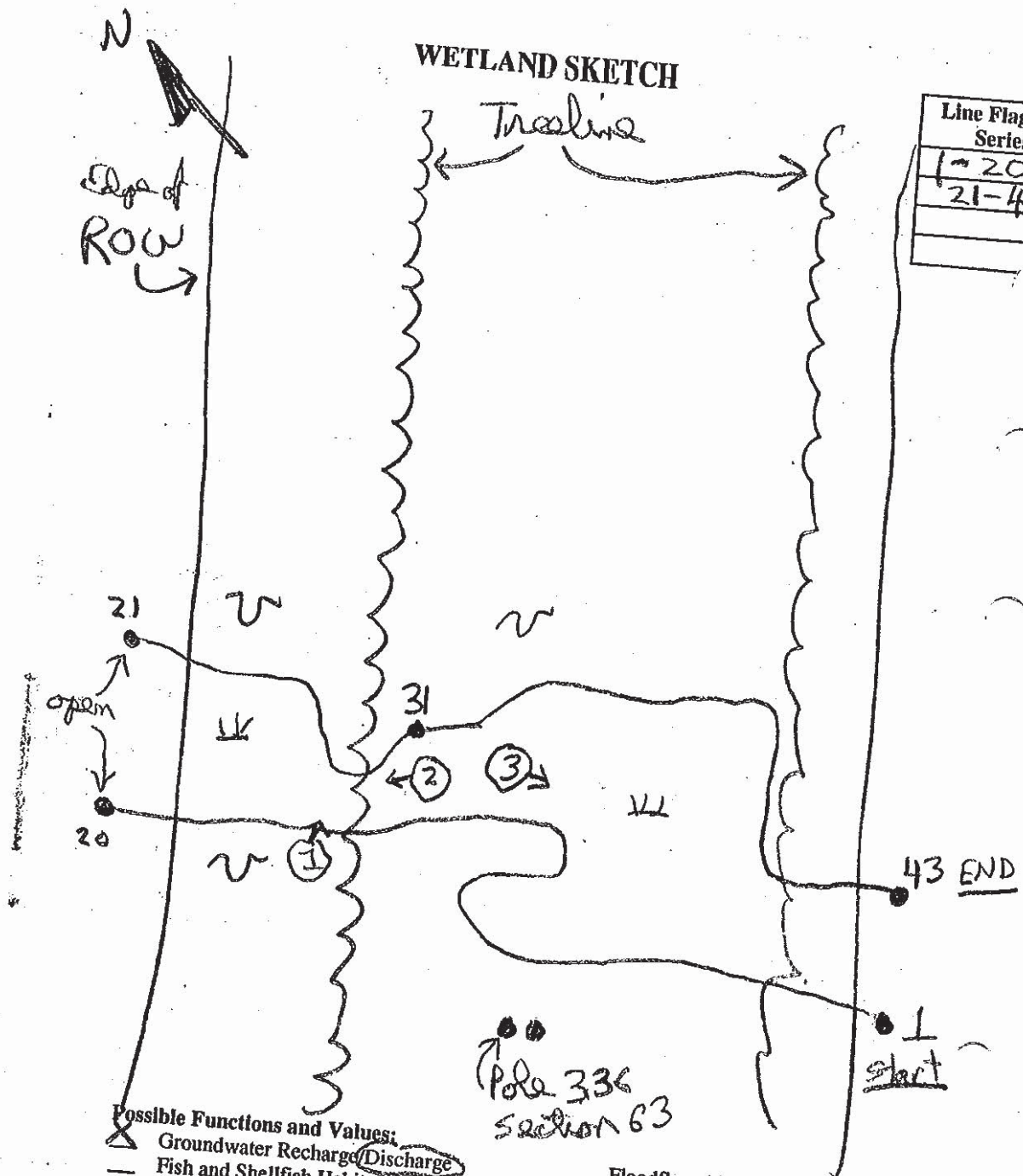
Notes: Couple of spring seeps disappear into W. W is in natural drainage way. W drains to NW

☐ Cedar Swamp

☐ Wetland of Special Significance

Photo # 1 (Flow), 2, 3

SKETCH ON BACK



Line Flagging Series
1-20
21-43

Possible Functions and Values:

- ☒ Groundwater Recharge/Discharge
- ☐ Fish and Shellfish Habitat
- ☐ Nutrient Removal
- ☐ Sediment/Shoreline Stabilization
- ☐ Recreation
- ☐ Uniqueness/Heritage
- ☐ Endangered Species Habitat

- ☐ Floodflow Alteration
- ☐ Sediment/Toxicant Retention
- ☐ Production Export
- ☒ Wildlife Habitat
- ☐ Educational/Scientific Value
- ☐ Visual Quality/Aesthetics
- ☐ Other

Checklist:

- ☒ Wetland ID# FIR-63-336-1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☒ Location of important wildlife sign.

ON BACK

WET-103-11

Maine Power Reliability Project
WETLAND SUMMARY FORM

Team F

Observers: MLW Date: 10-1-07 26-31
Town: NEW SHARON Series: 1-3 1-13 14-18 19-27
Segment #: 12 CMP Section #: 63 CMP Pole #: 350 Wetland ID #: 1
Stream/Waterbody ID: F12-103-320-1-1.2 Corps plot: Yes ☒ No
Dominant NWI Class: PSS 45% PFO 45% Other NWI Classes: P12M 10

Representative Wetland Vegetation (by Strata):

Herb
Gly mel Esp mac Shrub Trees
Tha pub Ast. vim Decid Bet all
ono sen bal fr Alm sug. Ab. bal
Imp car Poly sag
Cal dam

Representative Wetland Hydrology

☐ Permanently Flooded (approximate depth -) ☐ Seasonally Flooded (approximate depth -) ☒ Saturated

Hydrologic Indicators: ☐ Silt Deposition ☐ Water-Stained Leaves
☒ Water Marks ☐ Drift Lines ☐ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☒ Elevated Roots
Other Observations:

Representative Wetland Soils:
☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-5	On			
5-20	A	10YR 3/1	NIC 4/4 CMC 1/PSL	
20+	B	10YR 4/1	CMO	

Other Observations:
Meets NEIWPCC (2004) Criteria 17

Stream # 1 Data:
Width (Bank-Bank): 15 Depth @ Center: 2' Peren. ☒ Intermittent ☐
Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
Channel Substrate: ☐ Peat-Muck ☒ Silt-Mud ☒ Sand ☒ Gravel/Cobble ☒ Boulder
☐ Bedrock

Stream # 2 Data:
Width (Bank-Bank): 7' Depth @ Center: 2' Peren. ☒ Intermittent ☐
Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☒ Sand ☒ Gravel/Cobble ☐ Boulder
☐ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP): Black neck Duck, Chubs, Fish

Notes: Ruts in Northern tree line
Snow mounds with up road.

Flood plain wetland

☐ Cedar Swamp

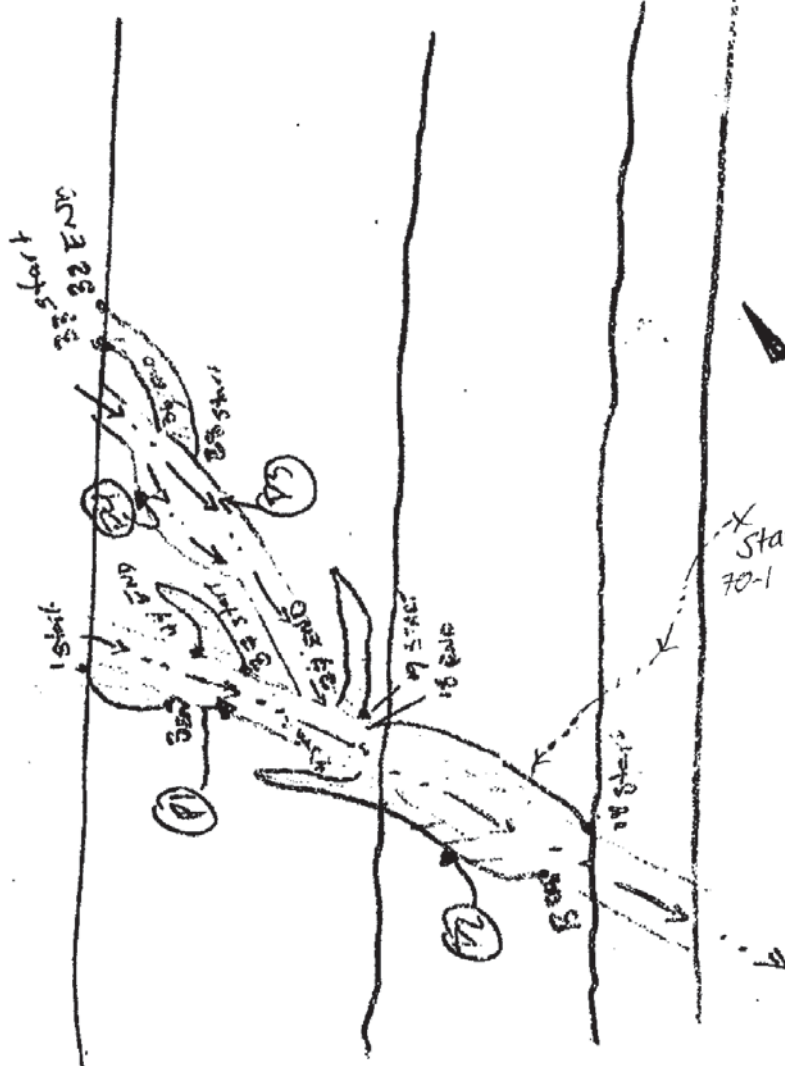
☒ Wetland of Special Significance

Photo # 142-4

SKETCH ON BACK

5.14.17
HSW
checked
hydro/veg soils
added stream #3
width: 18"
depth: 6"
intermittent
substrate: sand/gravel/
cobble

WETLAND SKETCH



Maine Power Reliability Project WETLAND SUMMARY FORM

Team F

Observers: JL MW Date: 9-1-07 26-31
Town: NEW SHARON Series: 13 14-18 19-27
Segment #: 12 CMP Section #: 63 CMP Pole #: 360 Wetland ID #: 1
Stream/Waterbody ID: F12-63-320-1-1,2 Corps plot: Yes ☒ No
Dominant NWI Class: PSS 45% PFO 4 45% Other NWI Classes: P12M 10

Representative Wetland Vegetation (by Strata):

Herb
Gly mel Esp mac Shrub Trees
Tha pub Aca ylm Arctost
ONO sen bal fri Bet all
Imp car Poly sag Ab lard
Cal dam

Representative Wetland Hydrology

☐ Permanently Flooded ☐ Seasonally Flooded ☒ Saturated
(approximate depth -) (approximate depth -)

Hydrologic Indicators: ☐ Silt Deposition ☐ Water-Stained Leaves
☒ Water Marks ☐ Drift Lines ☐ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☒ Elevated Roots

Other Observations:

Representative Wetland Soils:

☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-5	Oa			
5-20	A	10YR 2/6	NIC 4/4 CMO	VP SL
20+	B	10YR 4/6	↓ CMO	↓

Other Observations:

Meets NEIWPCC (2004) Criteria 177

Stream # 1 Data:

Width (Bank-Bank): 15 Depth @ Center: 2' Peren. ☒ Intermittent ☐
Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
Channel Substrate: ☐ Peat-Muck ☒ Silt-Mud ☒ Sand ☐ Gravel/Cobble ☒ Boulder
☐ Bedrock

Stream # 2 Data

Width (Bank-Bank): 7' Depth @ Center: 2' Peren. ☒ Intermittent ☐
Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☒ Sand ☒ Gravel/Cobble ☐ Boulder
☐ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP): Black bear trace, Chubs fish

Notes:

Rte in Northern tree line
Snow machine was in Row.

Flood plain wetland

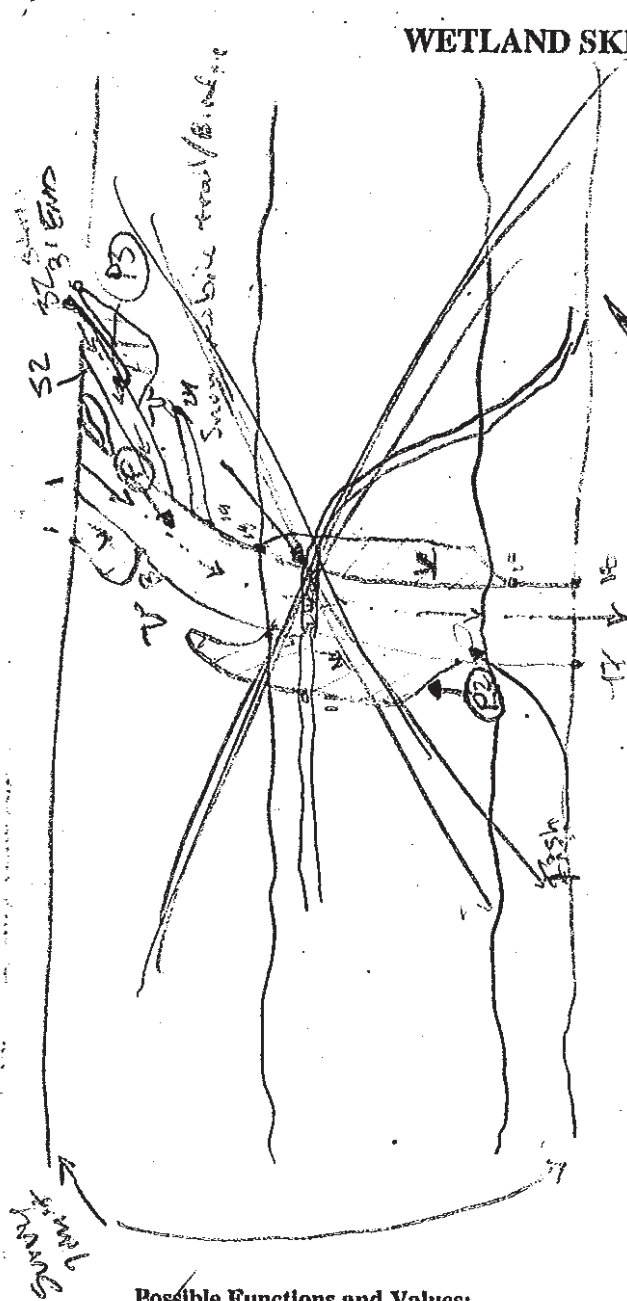
☐ Cedar Swamp

☒ Wetland of Special Significance

Photo # 1#2-4

SKETCH ON BACK

WETLAND SKETCH



Line Flagging Series
1-3
4-13
14-18
19-27

37 - Connect to S1-34
44 - Connect to S1-35

38-31
32-36
Stream OB 37-
1-17
18-

Stream 2
1-13 P10

Wetland flows connect to stream
3 Connect to Stream Flag 7
4 Connect to " " 12
13 " " " 16
14 " " " 21
25 " " " 10
37 " " " 11

Possible Functions and Values:

- ☒ Groundwater Recharge/Discharge
- ☒ Fish and Shellfish Habitat
- ☒ Nutrient Removal
- ☒ Sediment/Shoreline Stabilization
- ☒ Recreation Snow mobile
- ☒ Uniqueness/Heritage
- ☒ Endangered Species Habitat

- ☒ Floodflow Alteration
- ☒ Sediment/Toxicant Retention
- ☒ Production Export
- ☒ Wildlife Habitat
- ☒ Educational/Scientific Value
- ☒ Visual Quality/Aesthetics
- ☒ Other

Checklist:

- ☒ Wetland ID# F-12-63-390-1 + S1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☒ Location of important wildlife sign.

Cont.

Maine Power Reliability Project
WETLAND SUMMARY FORM

Team F

Observers: 26 MW Date: 10-1-07
Town: _____ Series: _____
Segment #: 12 CMP Section #: 63 CMP Pole #: 380 Wetland #: 1
Stream/Waterbody ID: _____ Corps plot: Yes ☒ No

Dominant NWI Class:

Other NWI Classes:

Stream 1 Representative Wetland Vegetation (by Strata):
Wetland Flag 3 Connect to S1 Flag 9 Stream 2
" " 4 " to S1 " 12 Flag 28 Connect to S2 10
" " 13 " to S1 " 15 Flag 29 " " S2 11
" " 14 " to S1 " 19 Flag 36 " " S2 18
" " 19 " to S1 " 23
" " 27 " Stream 3
" " 37 " " S1 " 36 Wetland 4 Flag 44 Connect to S1 35
_____ Permanently Flooded _____ Seasonally Flooded _____ Saturated
(approximate depth -) (approximate depth -)

Hydrologic Indicators: _____ Silt Deposition _____ Water-Stained Leaves
_____ Water Marks _____ Drift Lines _____ Surface Scouring
_____ Drainage Patterns _____ Buttressed Trees _____ Elevated Roots
Other Observations:

Representative
Wetland Soils:
_____ Mineral
_____ Organic

Depth	Horizon	Color	Redox Features	Texture

Other Observations:
Meets NEIWPCC (2004) Criteria _____

Stream # 1 Data: 33 Photo 4
Width (Bank-Bank): _____ Depth @ Center: 1' Peren. _____ Intermittent ☒
Bank Configuration: _____ Undercut ☒ Vertical ☒ Gradual ☒
Channel Substrate: _____ Peat-Muck _____ Silt-Mud ☒ Sand ☒ Gravel/Cobble _____ Boulder
_____ Bedrock

Stream # 2 Data
Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder
_____ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

Continued Form

Notes:

Sketch on BACK

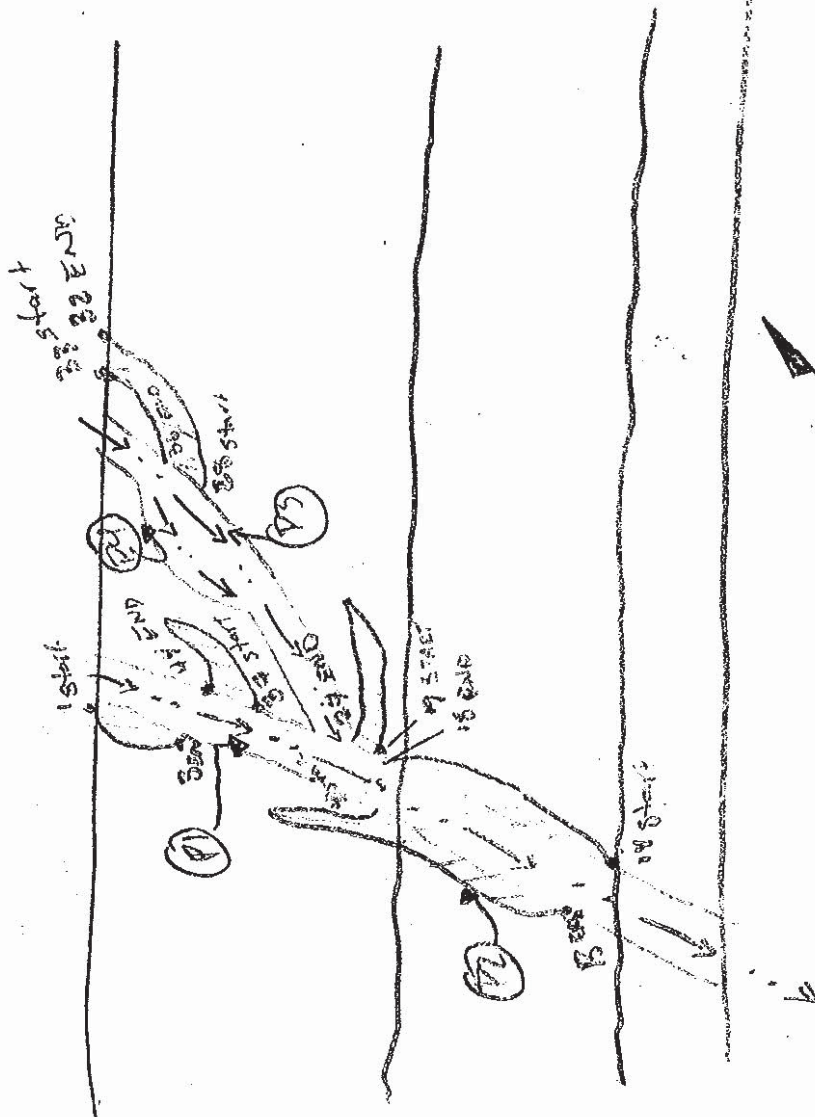
☐ Cedar Swamp

☐ Wetland of Special Significance

Photo # _____

SKETCH ON BACK

WETLAND SKETCH



Line Flagging Series
1-5
4-13
13-14
14-23

26-32
33-36
37-44

Stream 1

1-14
18-35

Stream 2

1-13

Stream 3

1-3

Possible Functions and Values:

- | | |
|---|---|
| <input type="checkbox"/> Groundwater Recharge/Discharge | <input type="checkbox"/> Floodflow Alteration |
| <input type="checkbox"/> Fish and Shellfish Habitat | <input checked="" type="checkbox"/> Sediment/Toxicant Retention |
| <input type="checkbox"/> Nutrient Removal | <input type="checkbox"/> Production Export |
| <input type="checkbox"/> Sediment/Shoreline Stabilization | <input checked="" type="checkbox"/> Wildlife Habitat |
| <input checked="" type="checkbox"/> Recreation | <input type="checkbox"/> Educational/Scientific Value |
| <input type="checkbox"/> Uniqueness/Heritage | <input type="checkbox"/> Visual Quality/Aesthetics |
| <input type="checkbox"/> Endangered Species Habitat | <input type="checkbox"/> Other |

Checklist:

- ☐ Wetland ID# F-12-13-380-1 cont.
- ☐ North arrow.
- ☐ Detailed sketch of wetland boundary and flagging sequence.
- ☐ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☐ Photo locations.
- ☐ Location of important wildlife sign.

WET-116-05

Rainy
hardMaine Power Reliability Project
WETLAND SUMMARY FORMObservers: JE/EF/mlTown: JAYDate: 8.15.06Segment #: 14CMP Section #: 63Series: 534Stream/Waterbody ID: F.W. 63-554-S1CMP Pole #: 534Wetland #: 1Corps plot: Yes NoDominant NWI Class: PFOEOther NWI Classes: PEMIE/POW

Representative Wetland Vegetation (by Strata):

PFO	① ACERUB	① ACERUB	PS3	(PEM)	LYSTER	ERI VIR
	BETALE	BETALE	SPI TOM	TIP LAT	CALCAN	POW
	FRANIG	FRANIG	SPIAIB	SCICYP	ONOSON	Pand. W. L.
	PRAPGN		NEM MUK	CAR SW	OSMGIN	ERIC. COV.
			ILVER	CAR WR	THYRAL	MYR. GAL
				CAR SP.	Sphag	TRI VIR
						OSM REG

Representative Wetland Hydrology

☒ Permanently Flooded
(approximate depth - 6")☒ Seasonally Flooded
(approximate depth - 8")☒ Saturated

Hydrologic Indicators:

☒ Water Marks☒ Silt Deposition☐ Drift Lines☐ Water-Stained Leaves☒ Drainage Patterns☒ Buttressed Trees☐ Surface Scouring☒ Elevated Roots

Other Observations:

Inundation -Representative
Wetland Soils:☒ Mineral☐ OrganicFree water @ 12"
Submerged to surface

Depth	Horizon	Color	Redox Features	Texture
2-0	O1			Fibric
0-3	A	10YR 4/1		SIL
3-9	B1g	2.5Y 4/1		Coarse sand
9-14	B2g	4/N	ORGANIC	FSIL
14-24	Cg	6/10Y	Streaky	FSIL

Other Observations:

Meets NEIWPCC (2004) Criteria ☒

Stream # 1 Data:

Width (Bank-Bank): 5'Depth @ Center: 5"Peren. ☒Intermittent ☐

Bank Configuration:

☐ Undercut☒ Vertical☐ Gradual

Channel Substrate:

☐ Peat-Muck☐ Silt-Mud☐ Sand☒ Gravel/Cobble☒ Boulder

Stream # 2 Data:

Width (Bank-Bank):

Depth @ Center:

Peren. ☐Intermittent ☐

Bank Configuration:

☐ Undercut☐ Vertical☐ Gradual

Channel Substrate:

☐ Peat-Muck☐ Silt-Mud☐ Sand☐ Gravel/Cobble☐ BoulderBedrock ☐

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

Coyote

moose

deer

Smybird

Red Sq.

GB Heron

Notes:

This is a large wetland system - pristine w/in tree line - Pond was noted in Spring as a SVP. Thick organic soil in much of area - rocky - pit/mound.

☐ Cedar Swamp☒ Wetland of Special SignificancePhoto # 6

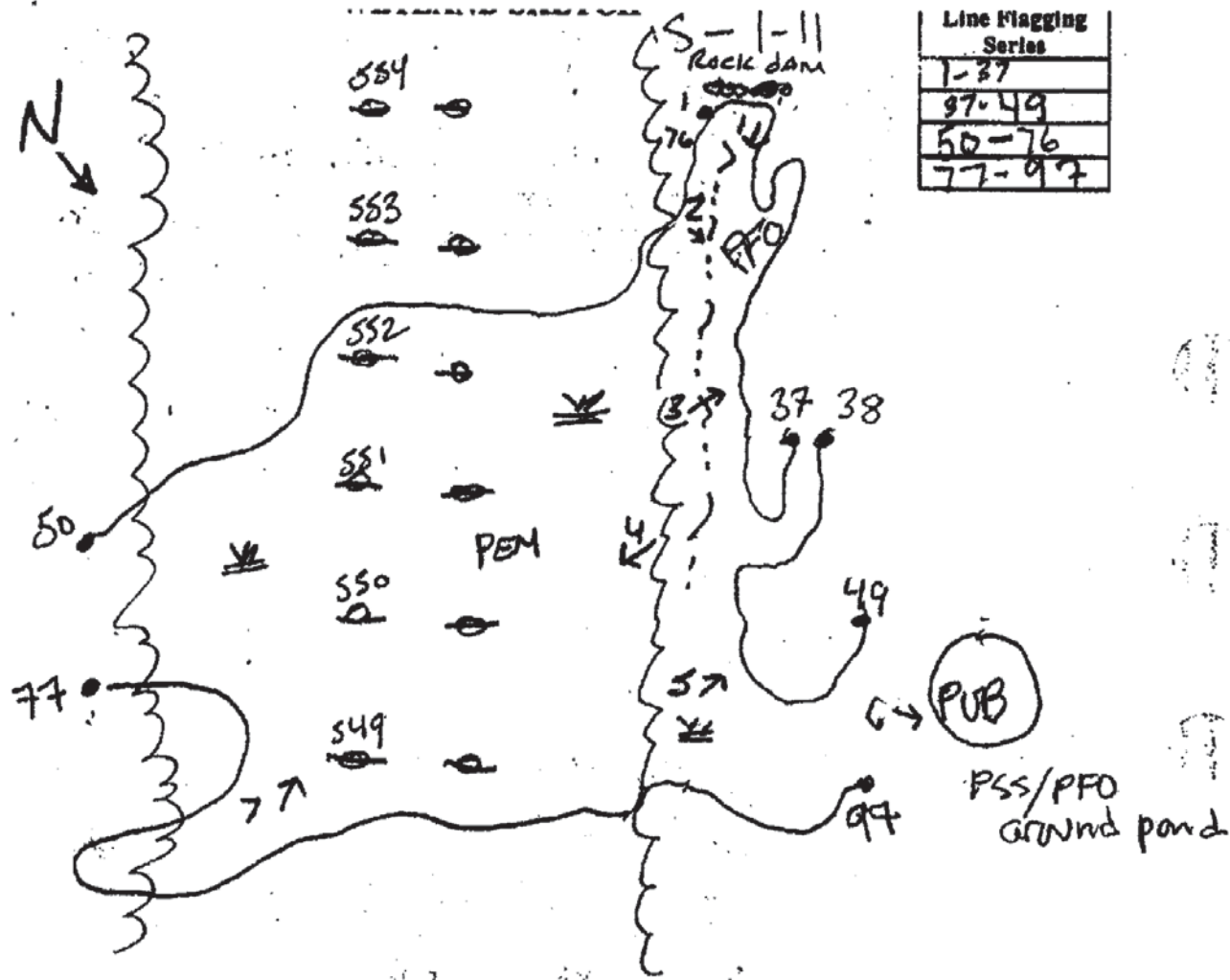
SKETCH ON BACK

Rock Dam separates 14-63-555 S1 from
14-63-554 S1

veg. soil, hydro good. Extended V band on E side

S.H.

Sam Hayden
5/2/17



Not to Scale!!!

Possible Functions and Values:

- ☒ Groundwater Recharge/Discharge
- ☒ Fish and Shellfish Habitat
- ☒ Nutrient Removal
- ☒ Sediment/Shoreline Stabilization
- ☒ Recreation *Hunting*
- ☒ Uniqueness/Heritage
- ☒ Endangered Species Habitat

- ☒ Floodflow Alteration
- ☒ Sediment/Toxicant Retention
- ☒ Production Export
- ☒ Wildlife Habitat
- ☒ Educational/Scientific Value
- ☒ Visual Quality/Aesthetics
- ☒ Other

Checklist:

- ☒ Wetland ID# P.14.63.554 W1/S1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☒ Location of important wildlife sign.

Sam Hayden 5/2/17

Plot data matches field conditions.
S.H.

F.14.63-SS4 W1

PROJECT TITLE: MPRP		TRANSECT: 1		PLOT: A	
DELINEATOR(S): E. Francine/S. Everett		DATE: 8-18-07			

VEGETATION	Stem and Species	Dominance Ratio	Percent Dominance	D.O.M.	NWI Status
T	Ø				
P	Ø				
S	ALN INK	40%	40/60	67	FACW
	ALC RUB	20%	20/60	37	FAC
H	OSM CIN	75%	75/95	79	FACW
	EDU SYL	10%	10/95	11	
	ONO SEN	10%	10/95	11	

HYDROPHYTES				NON-HYDROPHYTES		
OBL	FACW	FAC	OTHER	FAC	FACU	UPL
Hydrophytes Subtotal (A): 3				Non-hydrophytes Subtotal (B): 0		
PERCENT HYDROPHYTES (100A/A+B): 100%						

HYDROLOGY

☐ RECORDED DATA
 Stream, lake, or tidal gauge Identification: _____
 Aerial photography Identification: _____
 Other Identification: _____

☐ NO RECORDED DATA

☐ OBSERVATIONS:
 Depth to Free Water: @ 12"
 Depth to Saturation (including capillary fringe): @ surface
 Altered Hydrology (explain): _____

☐ Inundated
 ☒ Saturated in upper 12"
 ☒ Water Marks
 ☐ Drift Lines
 ☐ Sediment Deposits
 ☒ Drainage Patterns within Wetland

☐ OTHER (explain): _____

Maine Power Reliability Project

Team F

WETLAND SUMMARY FORM

Observers: SE/ML/EF Date: 7.18.07
 Town: Livermore Falls Series: _____
 Segment #: 39 CMP Section #: 89 CMP Pole #: 11 Wetland ID #: 1
 Stream/Waterbody ID: Same As F39896.1 Corps plot: Yes ☒ No ☐

Dominant NWI Class: PEM1

Other NWI Classes: _____

Representative Wetland Vegetation (by Strata):

(H) Cal can
 Phacaru
 Jun eff
 gly can
 Typ lat
 Car str
 Car sco
 Car flav
 Osm reg
 Lysim terr
 ver has
 pel vir (A)
 Lem min (A)
 (S) Spi alb
 Spi tom
 Aln inc

Representative Wetland Hydrology

☒ Permanently Flooded (approximate depth - 6") ☒ Seasonally Flooded (approximate depth -) _____ Saturated

Hydrologic Indicators: ☒ Silt Deposition _____ Water-Stained Leaves
 _____ Water Marks _____ Drift Lines _____ Surface Scouring
☒ Drainage Patterns _____ Buttressed Trees _____ Elevated Roots
 Other Observations: obvious inundation

Representative Wetland Soils:

☒ Mineral
☒ Organic

Depth	Horizon	Color	Redox Features	Texture
3-0	O:			Sibric
0-7	A	10YR 3/1	10YR 5/1	Silt & An
7-20	B	2.5Y 4/1	many redox	fine Sand loam

Other Observations:

Meets NEIWPCC (2004) Criteria ☒ Poorly drained

Stream # 1 Data:

Width (Bank-Bank): 2-3' Depth @ Center: 4'-6" Peren. ☒ Intermittent _____
 Bank Configuration: ☒ Undercut ☒ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck ☒ Silt-Mud _____ Sand ☒ Gravel/Cobble _____ Boulder
 _____ Bedrock Same Stream as F39896.1

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder
 _____ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

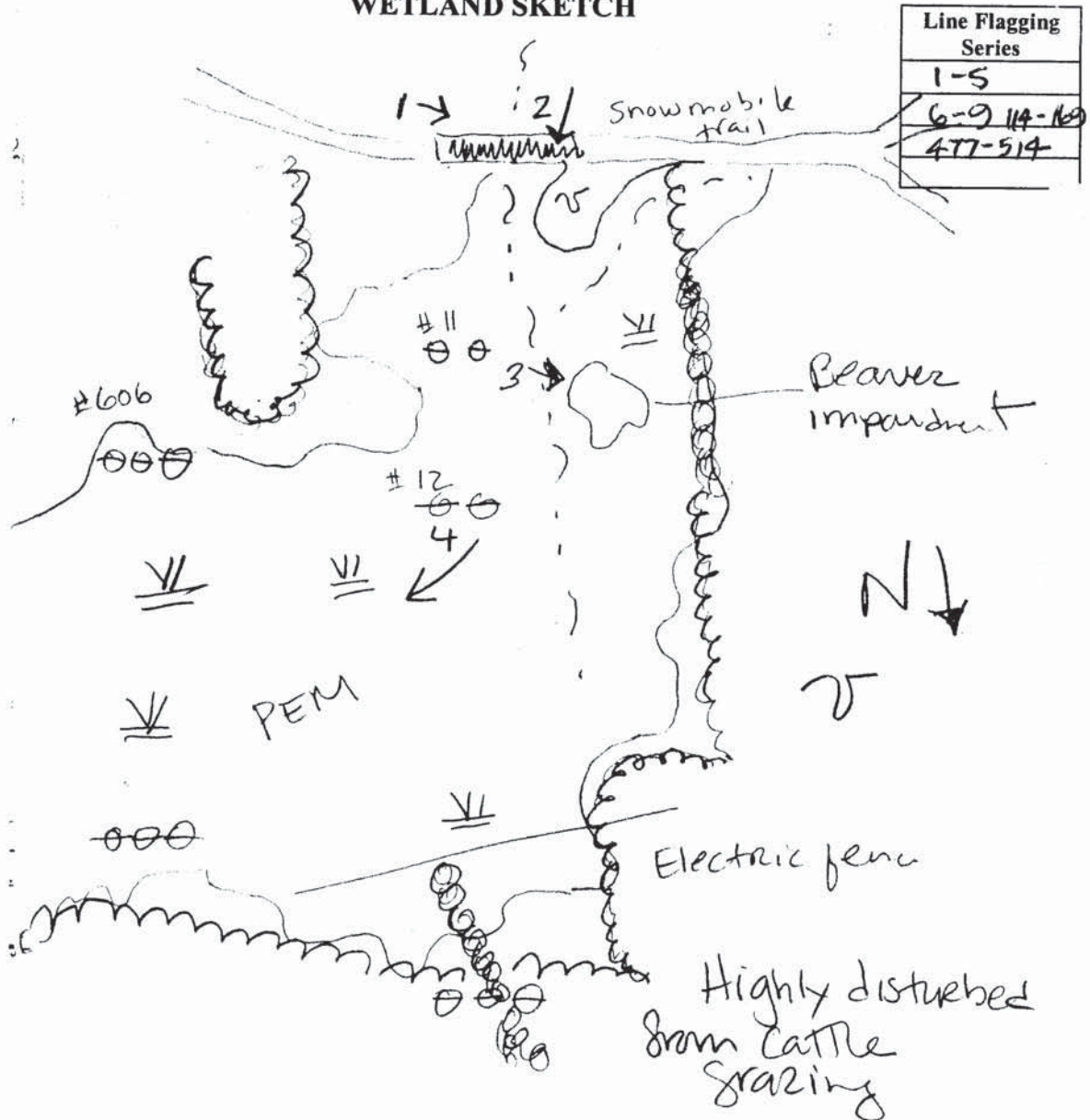
Deer songbirds
Beaver * Cows actively grazing
muskrat w/in Row

Notes: Very large wetland system which is
Contiguous to F39896.1 outside project area

☐ Cedar Swamp

☒ Wetland of Special Significance

WETLAND SKETCH



Possible Functions and Values:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Groundwater Recharge/Discharge | <input checked="" type="checkbox"/> Floodflow Alteration |
| <input checked="" type="checkbox"/> Fish and Shellfish Habitat | <input checked="" type="checkbox"/> Sediment/Toxicant Retention |
| <input checked="" type="checkbox"/> Nutrient Removal | <input checked="" type="checkbox"/> Production Export |
| <input checked="" type="checkbox"/> Sediment/Shoreline Stabilization | <input checked="" type="checkbox"/> Wildlife Habitat |
| <input checked="" type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Educational/Scientific Value |
| <input checked="" type="checkbox"/> Uniqueness/Heritage | <input checked="" type="checkbox"/> Visual Quality/Aesthetics |
| <input checked="" type="checkbox"/> Endangered Species Habitat | <input checked="" type="checkbox"/> Other |

Checklist:

- ☒ Wetland ID# F398911-1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☐ Location of important wildlife sign.

Extension

Maine Power Reliability Project

Team **F**

WETLAND SUMMARY FORM

Observers: RK & TD

Date: 8-5-8

Town: JAY

Series: 1x → 8x → 10x → 16

Segment #: 39 CMP Section #: 89

CMP Pole #: 11 Wetland #: 1

Stream/Waterbody ID: 731-89-11-1

Corps plot: Yes

Dominant NWI Class:

Other NWI Classes:

Representative Wetland Vegetation (by Strata):

- see F39-89-11-1 original notes

Representative Wetland Hydrology

☐ Permanently Flooded
(approximate depth -)

☐ Seasonally Flooded
(approximate depth -)

☐ Saturated

Hydrologic Indicators: ☐ Silt Deposition

☐ Water-Stained Leaves

☐ Water Marks

☐ Drift Lines

☐ Surface Scouring

☐ Drainage Patterns

☐ Buttressed Trees

☐ Elevated Roots

Other Observations:

**Representative
Wetland Soils:**

☐ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture

Other Observations:

Meets NEIWPCC (2004) Criteria ☐

Stream # 1 Data:

Width (Bank-Bank): ☐ Depth @ Center: ☐ Peren. ☐ Intermittent ☐

Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual

Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Stream # 2 Data

Width (Bank-Bank): ☐ Depth @ Center: ☐ Peren. ☐ Intermittent ☐

Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual

Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

Notes: 1-1x connect to 11-12

connected to >20,000 EM

☐ Cedar Swamp

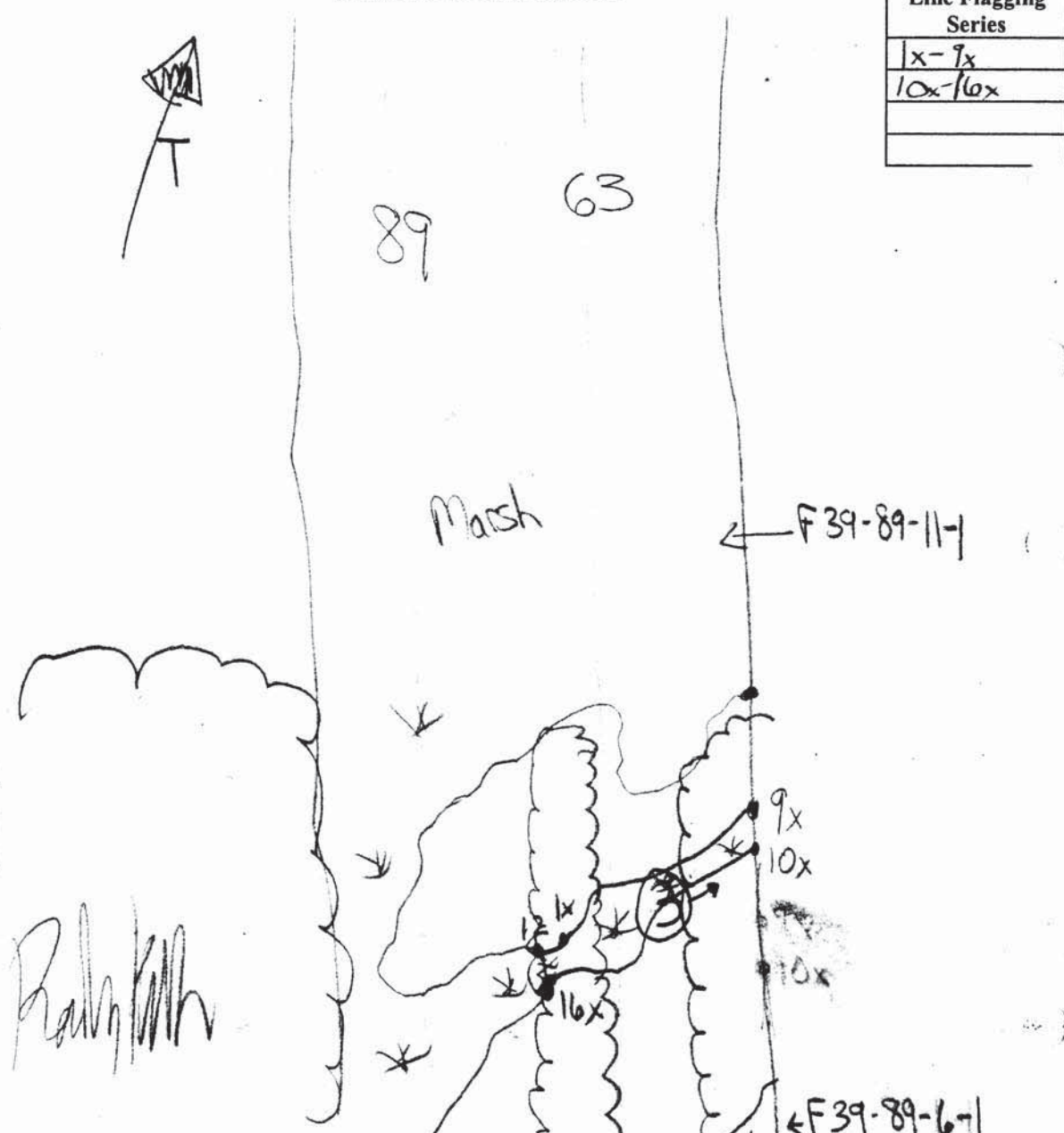
☒ Wetland of Special Significance

Photo # 3

SKETCH ON BACK

WETLAND SKETCH

Line Flagging Series
1x-7x
10x-16x



Possible Functions and Values:

- | | |
|---|---|
| <input type="checkbox"/> Groundwater Recharge/Discharge | <input type="checkbox"/> Floodflow Alteration |
| <input type="checkbox"/> Fish and Shellfish Habitat | <input type="checkbox"/> Sediment/Toxicant Retention |
| <input type="checkbox"/> Nutrient Removal | <input type="checkbox"/> Production Export |
| <input type="checkbox"/> Sediment/Shoreline Stabilization | <input type="checkbox"/> Wildlife Habitat |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Educational/Scientific Value |
| <input type="checkbox"/> Uniqueness/Heritage | <input type="checkbox"/> Visual Quality/Aesthetics |
| <input type="checkbox"/> Endangered Species Habitat | <input type="checkbox"/> Other |

Checklist:

- ☐ Wetland ID# F39-89-11-1 extension
- ☐ North arrow.
- ☐ Detailed sketch of wetland boundary and flagging sequence.
- ☐ Natural and man-made features – roads, culverts, outcrops, structures, etc.
- ☐ Photo locations.
- ☐ Location of important wildlife sign.

WET-122-03

Sain Ayden 4/30/17
Veg, soil, Hydro, delineation good.Maine Power Reliability Project
WETLAND SUMMARY FORMTeam E

Observers: SE, ML, JL Date: 6/21/07
 Town: IA Series:
 Segment #: 14 CMP Section #: 200 CMP Pole #: 5 Wetland #: 1
 Stream/Waterbody ID: E14-200-5-1-1,2 Corps plot: ☒ Yes ☒ No
 Dominant NWI Class: PSS 100% Other NWI Classes:

Representative Wetland Vegetation (by Strata):

HERBS
GLY CAN CAR CRI OSU CIN SUBS REN-OS162 DOGWOOD
OND SEN COR LUR CAL CAN ULN RUG VIB DEN
POA PRE SCI MIC PHAL ARIS RHA FRA
A

Representative Wetland Hydrology

☐ Permanently Flooded (approximate depth -) ☒ Seasonally Flooded (approximate depth - 2') ☐ Saturated

Hydrologic Indicators: ☒ Silt Deposition ☐ Water-Stained Leaves
☐ Water Marks ☐ Drift Lines ☒ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots

Other Observations:

Representative Wetland Soils:

☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-3	OA	10YR 3/1	—	Lo SA
3-20"	B	10YR 5/1	10% 0.54g 5h	Si Lo

Other Observations:
 Meets NEIWPCC (2004) Criteria XIII

Stream #1 Data: CH1
 Width (Bank-Bank): 5 Depth @ Center: 1.5 Peren. ☒ Intermittent ☐
 Bank Configuration: ☐ Undercut ☒ Vertical ☒ Gradual
 Channel Substrate: ☐ Peat-Muck ☒ Silt-Mud ☒ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Stream #2 Data: CH2
 Width (Bank-Bank): 3 Depth @ Center: 1.5 Peren. ☒ Intermittent ☐
 Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
 Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

SONG BIRDS
BEAVER ACTIVITY

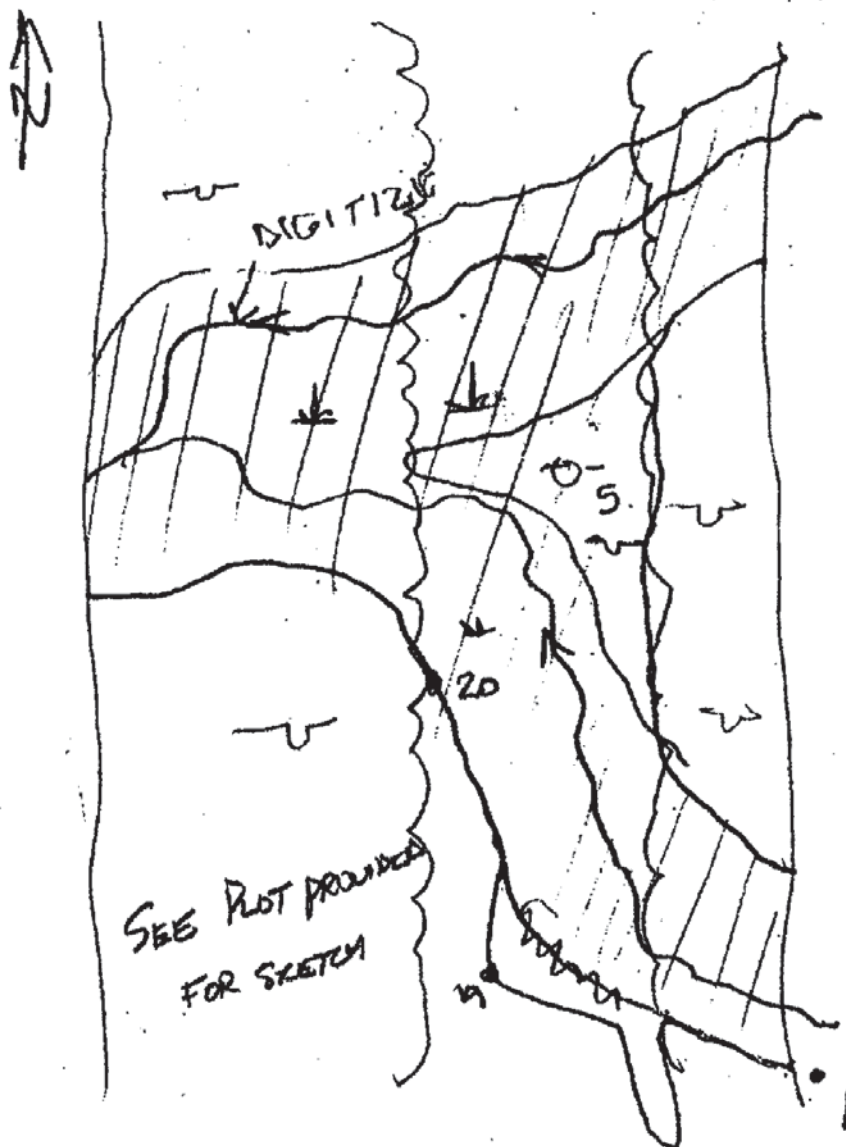
Notes:

☐ Cedar Swamp☒ Wetland of Special SignificancePhoto #

SKETCH ON BACK

WETLAND SKETCH

Line Flagging Series



Possible Functions and Values:

- ☒ Groundwater Recharge/Discharge
- ☒ Fish and Shellfish Habitat
- ☒ Nutrient Removal
- ☒ Sediment/Shoreline Stabilization
- ☐ Recreation
- ☐ Uniqueness/Heritage
- ☐ Endangered Species Habitat

- ☒ Floodflow Alteration
- ☒ Sediment/Toxicant Retention
- ☒ Production Export
- ☒ Wildlife Habitat
- ☐ Educational/Scientific Value
- ☐ Visual Quality/Aesthetics
- ☐ Other

Checklist:

- ☐ Wetland ID# F14-200-5-1
- ☐ North arrow.
- ☐ Detailed sketch of wetland boundary and flagging sequence.
- ☐ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☐ Photo locations.
- ☐ Location of important wildlife sign.

Sam Hydon 4/30/17

large K w/ different conditions

Majority is PSS w/ *Alnus incana*

otherwise it matches field conditions.

Sam, H.

FI4-200-5-1

PROJECT TITLE: MPPD		TRANSECT:	PLOT: WET	
DELINEATOR(S): ML. V6, SE		DATE: 6/21/07		
VEGETATION	Status and Species	Dominance Ratio	Percent Dominance	NWI Status
<u>Herbs</u> TYP LAT - 60% COL CAN - 40%				
HYDROPHYTES		NON-HYDROPHYTES		
OBL FACW FAC OTHER		FAC FACU UPL		
Hydrophytes Subtotal (A): 2		Non-hydrophytes Subtotal (B): _____		
PERCENT HYDROPHYTES (100A/A+B): 100%				
HYDROLOGY				
<input type="checkbox"/> RECORDED DATA				
Stream, lake, or tidal gage Identification: _____				
Aerial photography Identification: _____				
Other Identification: _____				
<input type="checkbox"/> NO RECORDED DATA				
<input type="checkbox"/> OBSERVATIONS:				
Depth to Free Water: SATURATED TO SURFACE				
Depth to Saturation (including capillary fringe): _____				
Altered Hydrology (explain): _____				
<input checked="" type="checkbox"/> Inundated <input type="checkbox"/> Saturated in upper 12" <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns within Wetland				
<input type="checkbox"/> OTHER (explain): _____				

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, etc., contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.)
0-4"	O	10YR 2/1	—	Muck
4-20"	A	2.5YR 5/1	FEL FINE 7.5YR 5/1	FINE SILTY LOAM

HYDRIC SOIL INDICATOR(S):

REFERENCE(S):

IV

OPTIONAL SOIL DATA

REFERENCE(S):

Taxonomic subgroup:
Soil drainage class:
Depth to active water table:
NTCHS hydric soil criterion:

CONCLUSIONS

YES NO REMARKS

Hydrophytic vegetation criterion met?

☒ ☐

Hydric soils criterion met?

☒ ☐

Wetland hydrology criterion met?

☒ ☐

IS THIS DATAPoint IN A WETLAND?

☒ ☐

CRN-008-PT Version 1/00 Page 2

PROJECT TITLE:

M.P.R.P.

TRANSECT:

EH-200-5-1

PLOT:

WET

F14-200-S-1

PROJECT TITLE: MPRP		TRANSECT:		PLOT: DEY	
DELINEATOR(S): SE J6 ML		DATE: 6/21/07			
VEGETATION	Stratum and Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
HERBS FIELD POTENTILLA - 20% POA sp. 60% WHITE CLOVER 10% SOLIDAGO sp. 10% SAPS: RINA FRA - 40% SPI TOM - 10%					
HYDROPHYTES		NON-HYDROPHYTES			
OBL <u>1</u> FACW <u>1</u> FAC <u>1</u> OTHER <u>1</u> Hydrophytes Subtotal (A): <u>4</u>		FAC <u>3</u> FACU <u>3</u> UPL <u>3</u> Non-hydrophytes Subtotal (B): <u>3</u>			
PERCENT HYDROPHYTES (100A/A+B): 57%					
HYDROLOGY <div style="display: flex; justify-content: space-between;"> <div> <input checked="" type="checkbox"/> RECORDED DATA <small>Stream, lake, or tidal gauge</small> <small>Aerial photography</small> <small>Other</small> </div> <div> Identification: _____ Identification: _____ Identification: _____ </div> </div> <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> NO RECORDED DATA <input type="checkbox"/> OBSERVATIONS: </div> <div> Absent </div> </div> <div style="margin-top: 10px;"> Depth to Free Water: _____ Depth to Saturation (including capillary fringe): _____ Altered Hydrology (explain): _____ </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div> <input type="checkbox"/> Inundated <input type="checkbox"/> OTHER (explain): _____ </div> <div> <input type="checkbox"/> Saturated in upper 12" <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Depositions <input type="checkbox"/> Drainage Patterns within Wetland </div> </div>					

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, mottles, pore linings, restrictive layers, root distribution, soil water, etc.)
0-8"	A	2.5Y 5/4	—	Sandy loam
8-15"	B	2.5Y 6/6	FC 10yr 5/6	Sandy loam

HYDRIC SOIL INDICATOR(S):

REFERENCE(S):

LOWE

OPTIONAL SOIL DATA

REFERENCE(S):

Taxonomic subgroup:
Soil drainage class:
Depth to active water table:
NCHS hydric soil criterion:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation criterion met?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Hydric soils criterion met?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Wetland hydrology criterion met?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
IS THIS DATAPOINT IN A WETLAND?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

DNREC COR-CT Version 11/09 Page 2

PROJECT TITLE

MPRP

TRANSECT:

F14-200-5-1

PLOT:

25

Date: 4/26/17	Project Name: QMI
Job #: 532	Cowardin Class(es) & %: PFO/4E
Observers: J. Boyle, CTF	Photo(s) #: 2
Comments:	

Dominant Vegetation (by stratum):

Herbs	Herbs (cont.)	Shrubs/Saplings	Trees	Vines
CHO sens		Abies bal	Abi bal	
asm cinn		Acer rub	Bet penn	
lady fern			Acer rub	

Wetland Hydrology Indicators:

Perm. Flooded (approx. depth:)	<input checked="" type="checkbox"/> Seasonally Flooded/Saturated (approx. depth: 1")	Saturated	
*A1 - Surface water	*B5 - Iron deposits	*B15 - Marl deposits	*C7 - Thin muck surface
*A2 - High water table	B6 - Surface soil cracks	B16 - Moss trim lines	C8 - Crayfish burrows
*A3 - Saturation	*B7 - Inundated aerial imagery	*C1 - Hydrogen sulfide odor	C9 - Saturation visible on aerial imagery
*B1 - Water marks	*B8 - Sparse veg. concave surface	C2 - Dry-season water table	*D1 - Stunted or stressed plants
*B2 - Sediment deposits	*B9 - Water-stained leaves	*C3 - Oxidized rhizospheres - living root	*D2 - Geomorphic position
*B3 - Drift deposits	B10 - Drainage patterns	*C4 - Presence of reduced iron	*D3 - Shallow aquitard
*B4 - Algal mat or crust	*B13 - Aquatic fauna	*C6 - Recent iron reduction in tilled soils	*D4 - Microtopographic relief
*Denotes Primary Indicator			*D5-FAC-neutral test

Representative Hydric Soils:

Depth (in)	Horizon	Texture	Color	Redox. Features	Other
0-2	A	SL	10YR 2/2	-	
2-15 +	B	CL	10YR 5/1	7.5YR 4/4 10%	

Hydric Soil Indicator & Reference:

Other Soil Comments:

SKETCH →

Maine Power Reliability Project

Team F

WETLAND SUMMARY FORM

Observers: MOORE, PETERS, LASHER Date: 5 SEP 2007
 Town: LIVERMORE FALLS Series: 1-37, 38-C1, 52-1
 Segment #: 14 CMP Section #: 200 CMP Pole #: 888 Wetland ID #: 2
 Stream/Waterbody ID: F-14-200-88-2 Corps plot: Yes ☒ No

Dominant NWI Class: PFO (50%)

Other NWI Classes: PEN

Representative Wetland Vegetation (by Strata):

HERBS
 • OMO SEN • CAR FLA
 • OSM CIN • CAR CRI
 • OSM REB • SCI MAS
 • SPHAGNUM SP. • GLY CM
 • EQU VAR • POL SAG
 • ERI VIR

SHRUBS
 • ILE VER • KAL ANG
 • SPI LAY • RHO CAN
 • SPI TOM
 • LYO LIG
 • COR AMO

TREES
 • ERA PEN
 • ACE RUB
 • BET POP
 • LAR LAR

Representative Wetland Hydrology

☐ Permanently Flooded (approximate depth -) ☐ Seasonally Flooded (approximate depth -) ☒ Saturated

Hydrologic Indicators: ☐ Silt Deposition ☒ Water-Stained Leaves
☐ Water Marks ☐ Drift Lines ☐ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☒ Elevated Roots

Other Observations:

- PIT & MOUND TOPO IN FORESTED AREA

Representative Wetland Soils:
☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
3-0	O	DARK BR	—	FIBRIC
0-1	A	SYR 3/4	—	SIL
1-6	B ₁	2.5Y 5/6	—	M SAND
6+	B ₂	2.5Y 4/1	10YR 5/8	M SAND

Redox: C, M, D

Other Observations:

Meets NEIWPCC (2004) Criteria X B * (NOTES) 12

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder
 _____ Bedrock

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder
 _____ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

- DEER TRACKS

Notes:

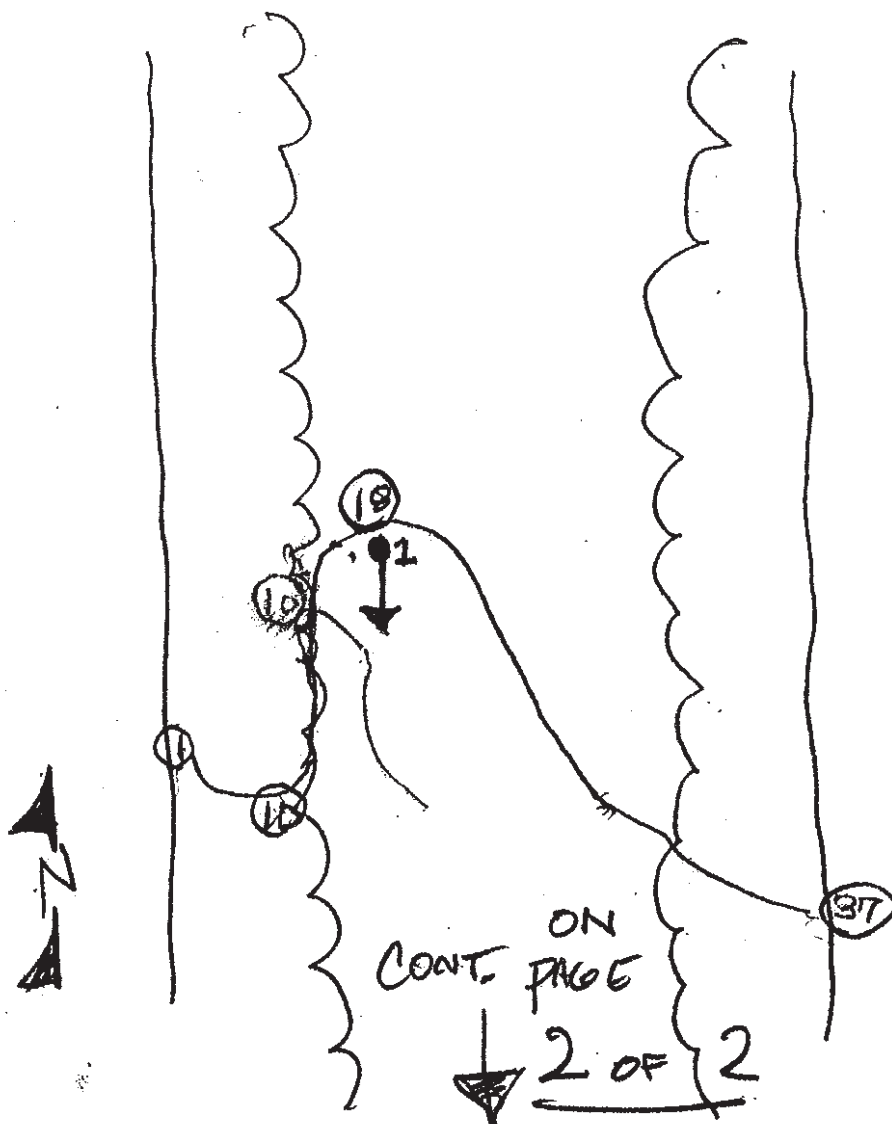
* SOILS - APPEARS TO BE ~~REDA~~ BUT STRIPPED TE
 LAYER IS BETWEEN DARK A AND SAND w/ REDOX
 FEATURES. PLANT COMM. & HYDROLOGY DEMONSTRATE
☐ Cedar Swamp ☐ Wetland of Special Significance
 WETLAND CONDITION.

Photo # _____

SKETCH ON BACK

WETLAND SKETCH

Line Flagging Series
1-37
28-5
52-1



Possible Functions and Values:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Groundwater Recharge/Discharge | <input type="checkbox"/> Floodflow Alteration |
| <input type="checkbox"/> Fish and Shellfish Habitat | <input type="checkbox"/> Sediment/Toxicant Retention |
| <input type="checkbox"/> Nutrient Removal | <input type="checkbox"/> Production Export |
| <input type="checkbox"/> Sediment/Shoreline Stabilization | <input type="checkbox"/> Wildlife Habitat |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Educational/Scientific Value |
| <input type="checkbox"/> Uniqueness/Heritage | <input type="checkbox"/> Visual Quality/Aesthetics |
| <input type="checkbox"/> Endangered Species Habitat | <input type="checkbox"/> Other |

Checklist:

- ☐ Wetland ID# F-14-200-88-2
- ☐ North arrow.
- ☐ Detailed sketch of wetland boundary and flagging sequence.
- ☐ Natural and man-made features – roads, culverts, outcrops, structures, etc.
- ☐ Photo locations.
- ☐ Location of important wildlife sign.

Maine Power Reliability Project

Team F

WETLAND SUMMARY FORM

Observers: PETERS / MOORE / LASHER Date: 5 SEP 2004
Town: LIV. FALLS Series: 1-37, 38-51, 52-1
Segment #: 14 CMP Section #: 200 CMP Pole #: 03 Wetland ID #: 2
Stream/Waterbody ID: 1-14-100 Corps plot: Yes ☒ No

Dominant NWI Class:

Other NWI Classes:

Representative Wetland Vegetation (by Strata):

CONT.
* PAGE 2 of 2 *

Representative Wetland Hydrology

☐ Permanently Flooded ☐ Seasonally Flooded ☐ Saturated
(approximate depth -) (approximate depth -)

Hydrologic Indicators: ☐ Silt Deposition ☐ Water-Stained Leaves
☐ Water Marks ☐ Drift Lines ☐ Surface Scouring
☐ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots

Other Observations:

Representative
Wetland Soils:

☐ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture

Other Observations:

Meets NEIWPCC (2004) Criteria ☐

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
_____ Bedrock

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
_____ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses,
potential VP):

Notes:

* SKETCH CONT. ON BACK *

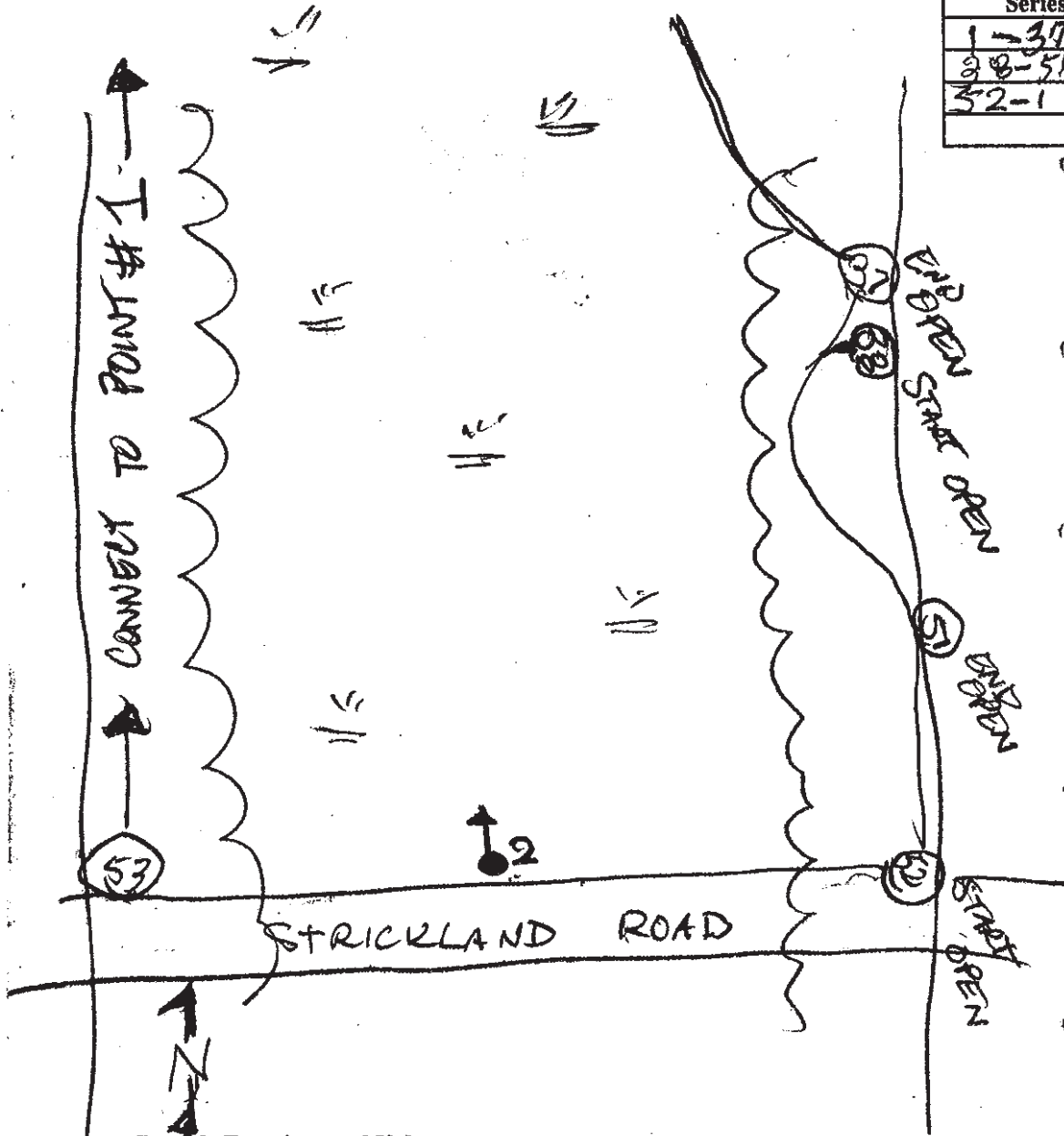
☐ Cedar Swamp☐ Wetland of Special Significance

Photo # _____

SKETCH ON BACK

WETLAND SKETCH

Line Flagging Series
1-37
28-51
52-1



Possible Functions and Values:

- ☒ Groundwater Recharge/Discharge
- ☐ Fish and Shellfish Habitat
- ☐ Nutrient Removal
- ☐ Sediment/Shoreline Stabilization
- ☐ Recreation
- ☐ Uniqueness/Heritage
- ☐ Endangered Species Habitat

- ☐ Floodflow Alteration
- ☐ Sediment/Toxicant Retention
- ☐ Production Export
- ☒ Wildlife Habitat
- ☐ Educational/Scientific Value
- ☐ Visual Quality/Aesthetics
- ☐ Other

Checklist:

- ☐ Wetland ID# F-14-200-88-2
- ☐ North arrow.
- ☐ Detailed sketch of wetland boundary and flagging sequence.
- ☐ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☐ Photo locations.
- ☐ Location of important wildlife sign.

WET-131-01

Sam Hayden 9/29/17
 Veg, soil, hydro, delineation, ground.
 correct S.H.

Maine Power Reliability Project WETLAND SUMMARY FORM

Team F

Observers: SE ML MW Date: 9/10/07
 Town: LEEDS Series: _____
 Segment #: 14 CMP Section #: 200 CMP Pole #: 115 Wetland #: 1
 Stream/Waterbody ID: E14-200-115-1-1 Corps plot: X Yes No
 Dominant NWI Class: PFO1 Other NWI Classes: PEM1

Representative Wetland Vegetation (by Strata):

HERBS

JENK VERT
 ONO SEN
 OSM CIN

SHRUBS

POA PRE
 OILY DOGWOOD
 ULN RUB

TREES

FRAPEN
 AM. ELM
 ACERUB

Representative Wetland Hydrology

____ Permanently Flooded
 (approximate depth -)

☒ Seasonally Flooded
 (approximate depth - 2')

____ Saturated

Hydrologic Indicators: _____

Silt Deposition _____

Water-Stained Leaves _____

☒ Water Marks _____

☒ Drift Lines _____

☒ Surface Scouring _____

☒ Drainage Patterns _____

Buttressed Trees _____

☒ Elevated Roots

Other Observations:

Representative Wetland Soils:

☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-6	A	10YR 3/4	—	3.1 Loam
6-18"	B	2.5Y 4/2	10YR 10/2 4/6	3.1 Loam

Other Observations:

Meets NEIWPCC (2004) Criteria XII

Stream # 1 Data:

Width (Bank-Bank): 4' Depth @ Center: 2' Peren. — Intermittent ☒

Bank Configuration: — Undercut ☒ Vertical ☒ Gradual

Channel Substrate: — Peat-Muck ☒ Silt-Mud ☒ Sand — Gravel/Cobble — Boulder
— Bedrock

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____

Bank Configuration: — Undercut — Vertical — Gradual

Channel Substrate: — Peat-Muck — Silt-Mud — Sand — Gravel/Cobble — Boulder
— Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

DEER TRACKS

Notes:

☐ Cedar Swamp

☒ Wetland of Special Significance

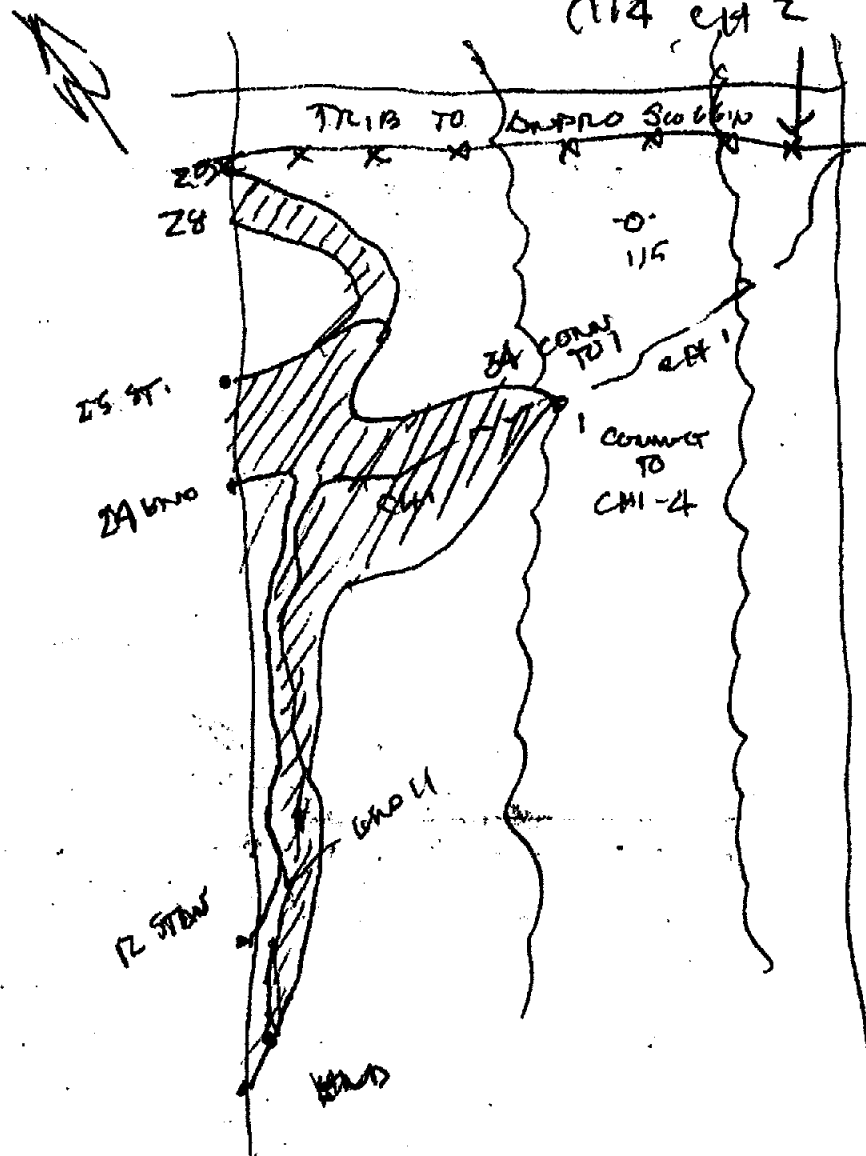
Photo # _____

SKETCH ON BACK

WETLAND SKETCH

(114) CH 2

Line Flagging Series
1-11
12-24
25-34
35-36



Possible Functions and Values:

- ☐ Groundwater Recharge/Discharge
- ☐ Fish and Shellfish Habitat
- ☐ Nutrient Removal
- ☒ Sediment/Shoreline Stabilization
- ☐ Recreation
- ☐ Uniqueness/Heritage
- ☐ Endangered Species Habitat
- ☒ Floodflow Alteration
- ☒ Sediment/Toxicant Retention
- ☒ Production Export
- ☒ Wildlife Habitat
- ☐ Educational/Scientific Value
- ☒ Visual Quality/Aesthetics
- ☐ Other

Checklist:

- ☐ Wetland ID# F14-200-115-1
- ☐ North arrow.
- ☐ Detailed sketch of wetland boundary and flagging sequence.
- ☐ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☐ Photo locations.
- ☐ Location of important wildlife sign.

Sam Hayden 4/29/17
Field conditions match form data
Correct SH.

EA-200-115-1

PROJECT TITLE: MPRP		TRANSECT:	PLOT: WEST	
DELINEATOR(S): SE ML MW		DATE: 9/10/07		
VEGETATION	Stratum and Species	Dominance Ratio	Percent Dominance	D O M
<u>HERBS</u>				
	JEWEL WEED - 80%			
	ONO SEN - 10%			
<u>SHRUBS</u>				
	SILKY DOGWOOD - 10%			
	ALN RUB - 10%			
<u>SAPES</u>				
	AM. ELM - 5%			
	FRA PEN - 5%			
<u>TREES</u>				
	FRA PEN - 80%			
HYDROPHYTES		NON-HYDROPHYTES		
OBL	FACW	FAC	OTHER	FAC FACU UPL
Hydrophytes Subtotal (A):		Non-hydrophytes Subtotal (B):		
PERCENT HYDROPHYTES (100A/A+B):				
HYDROLOGY				
<input type="checkbox"/> RECORDED DATA				
Stream, lake, or tidal gage Identification: _____				
Aerial photography Identification: _____				
Other Identification: _____				
<input type="checkbox"/> NO RECORDED DATA				
<input type="checkbox"/> OBSERVATIONS:				
Depth to Free Water: _____				
Depth to Saturation (including capillary fringe): _____				
Altered Hydrology (explain): _____				
<input type="checkbox"/> Inundated	<input type="checkbox"/> Saturated in upper 12"	<input checked="" type="checkbox"/> Water Marks	<input checked="" type="checkbox"/> Drift Lines	<input checked="" type="checkbox"/> Sediment Deposits
<input type="checkbox"/> OTHER (explain):	<input checked="" type="checkbox"/> Drainage Patterns within Wetland			

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, mottles, pore linings, redoxi- c layers, root distribution, soil water, etc.)
0-6	A	10YR 3/2	—	S. Loam
6-18	B	2.5Y 4/2	10% 10YR 4/6	S. Loam

HYDRIC SOIL INDICATOR(S):

REFERENCE(S):

OPTIONAL SOIL DATA

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

Depth to active water table:

NTCHS hydric soil criterion:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation criterion met?	<input type="checkbox"/>	<input type="checkbox"/>	
Hydric soils criterion met?	<input type="checkbox"/>	<input type="checkbox"/>	
Wetland hydrology criterion met?	<input type="checkbox"/>	<input type="checkbox"/>	
IS THIS DATAPoint IN A WETLAND?	<input type="checkbox"/>	<input type="checkbox"/>	

ORNL-508-27, Version 2.000, Plot 1

PROJECT TITLE:

M.P.P.D.

TRANSECT:

EH-200-115-1

PLOT:

✱

FL4-200-115-1

PROJECT TITLE: MPRP TRANSECT: PLOT: Day
 DELINEATOR(S): SE ML MW DATE: 9/10/07

VEGETATION	Stratum and Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
<u>HERBS</u>					
	ONON BEN 5%				
	FALSE SOLMSAL -10%				
	TRIUMM - 2%				
	POISON ILM - 10%				
<u>SAPS</u>					
	CHOCK CHERRY - 50%				
	ACE SUG - 5%				
	QUE RES - 15%				
<u>TREES</u>					
	PIN STR - 20%				
	QUE RES - 20%				
	BASS WAMP - 15%				

HYDROPHYTES

NON-HYDROPHYTES

OBL FACW FAC OTHER

FAC FACU UPL

Hydrophytes Subtotal (A):

Non-hydrophytes Subtotal (B):

PERCENT HYDROPHYTES (100A/A+B):

HYDROLOGY

☐ RECORDED DATA

Stream, lake, or tidal gage

Aerial photography

Other

Identification:

Identification:

Identification:

Absent

☐ NO RECORDED DATA

☐ OBSERVATIONS:

Depth to Free Water:

Depth to Saturation (including capillary fringe):

Altered Hydrology (explain):

☐ Inundated

☐ Saturated in upper 12"

☐ Water Marks

☐ Drift Lines

☐ Sediment Deposits

☐ Drainage Patterns within Wetland

☐ OTHER (explain):

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, mottles, pore linings, restrictive layers, root distribution, soil water, etc.)
0-6	A	10YR ³ / ₃	—	Sandy Loam
8-20"	B	2.5Y ⁵ / ₆	—	F Sandy loam

HYDRIC SOIL INDICATOR(S):

REFERENCE(S):

NONE -

OPTIONAL SOIL DATA

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

Depth to active water table:

NTCHS hydric soil criterion:

XB

CONCLUSIONS

YES

NO

REMARKS:

Hydrophytic vegetation criterion met?

☒

☒

Hydric soils criterion met?

☒

☒

Wetland hydrology criterion met?

☒

☒

IS THIS DATAPoint IN A WETLAND?

☒

☒

ORNL-COR-PT Version 7/1999 Page 2

PROJECT TITLE:

TRANSECT:

PLOT:

MPRP

EM-200-115-1

00

Maine Power Reliability Project WETLAND SUMMARY FORM

Team B

Observers: MC, MP Date: 10-2-07
Town: Greene Series: 0182
Segment #: 14 CMP Section #: 200 CMP Pole #: 236 Wetland #: 1
Stream/Waterbody ID: C#1 Corps plot: ☒ Yes ☐ No

Dominant NWI Class: PSS 1

Other NWI Classes: PP0

Representative Wetland Vegetation (by Strata):
Ile vert (Sh) Acer rub Vib dent Acer rub Alnus rug
Glycan Asm Cornus Spiral Berony Sol 919 onotens eculur Scicyp Car crin
Acer rub Vib Acer Spi Bet all Bet pop Abi lup Ulm Amur

Representative Wetland Hydrology
☒ Permanently Flooded (approximate depth - 12-24") ☒ Seasonally Flooded (approximate depth - 6") upper portions ☐ Saturated

Hydrologic Indicators: ☐ Silt Deposition ☒ Water Stained Leaves ☐ Water Marks ☐ Drift Lines ☐ Surface Scouring ☒ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots
Other Observations:

Representative Wetland Soils:
☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-15	A ₁	5Y 4/1		Silt
15-18	B ₁	5Y 4/2		Silt
18-4	B ₂	5Y 5/2	10YR 4/6	Silt

Other Observations:
Meets NEIWPCC (2004) Criteria VII

Stream # 1 Data:
Width (Bank-Bank): 6' Depth @ Center: 12" Peren. ☒ Intermittent ☐
Bank Configuration: ☒ Undercut ☐ Vertical ☐ Gradual
Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☒ Boulder ☐ Bedrock

Stream # 2 Data:
Width (Bank-Bank): Depth @ Center: Peren. ☐ Intermittent ☐
Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder ☐ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):
morse
deer

Notes: streamside
flows into lake Allen Pond

☐ Cedar Swamp

☒ Wetland of Special Significance

Photo # 7/8

SKETCH ON BACK

WETLAND SKETCH

Line Flagging

Series

1-7
8-21

PH 8 sheet

PH 7

234

235

CH 1-4

open lke

236

Possible Functions and Values:

- ☒ Groundwater Recharge/Discharge
- ☒ Fish and Shellfish Habitat
- ☒ Nutrient Removal
- ☐ Sediment/Shoreline Stabilization
- ☐ Recreation
- ☐ Uniqueness/Heritage
- ☐ Endangered Species Habitat

- ☒ Floodflow Alteration
- ☐ Sediment/Toxicant Retention
- ☒ Production Export
- ☒ Wildlife Habitat
- ☐ Educational/Scientific Value
- ☐ Visual Quality/Aesthetics
- ☐ Other

Checklist:

- ☒ Wetland ID# **B14-200-236-1**
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☒ Location of important wildlife sign.

Maine Power Reliability Project WETLAND SUMMARY FORM

Team B

Observers: KF, MC Date: 9/28/07
Town: Greene Series: over
Segment #: 14 CMP Section #: 200 CMP Pole #: 267 Wetland #: 1
Stream/Waterbody ID: _____ Corps plot: Yes No

Dominant NWI Class: PEN1

Other NWI Classes: PFO

Representative Wetland Vegetation (by Strata):

Sci cyp Uls dent (sh) Spi lat Ace rb Y4
Car lac Aln rug (sh) Aln rug
Sol qig Spi tom Larch
typ lat Car lac Bet all
Alb gal

Representative Wetland Hydrology

☐ Permanently Flooded
(approximate depth -)

☒ Seasonally Flooded
(approximate depth - 12")

☐ Saturated

Hydrologic Indicators: ☐ Silt Deposition

☒ Water Marks

☐ Drift Lines

☐ Water-Stained Leaves

☒ Drainage Patterns

☐ Buttressed Trees

☐ Surface Scouring

☐ Elevated Roots

Other Observations:

Representative Wetland Soils:

☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
<u>18-0</u>	<u>Oe</u>	<u>10y R2/2</u>	<u>—</u>	<u>14euvic</u>
<u>0-1</u>	<u>B1</u>	<u>5gY5/1</u>	<u>—</u>	<u>Silt</u>

Other Observations:

Meets NEIWPCC (2004) Criteria III

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____

Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____

Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
Bedrock

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____

Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____

Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

Notes:

prob. connects to Daggert Bog
✓ w/ IFW re DWA

☐ Cedar Swamp

☒ Wetland of Special Significance

Photo # 1/2

SKETCH ON BACK

WETLAND SKETCH

Line Flagging Series
1-10
11-24
25-38

Oil: pls see me about this line

MC

35

PEUM

1025

24

266

011

PEUM

PH1 ↑

267

PH2
F109

Possible Functions and Values:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Groundwater Recharge/Discharge | <input checked="" type="checkbox"/> Floodflow Alteration |
| <input checked="" type="checkbox"/> Fish and Shellfish Habitat | <input checked="" type="checkbox"/> Sediment/Toxicant Retention |
| <input checked="" type="checkbox"/> Nutrient Removal | <input checked="" type="checkbox"/> Production Export |
| <input type="checkbox"/> Sediment/Shoreline Stabilization | <input checked="" type="checkbox"/> Wildlife Habitat |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Educational/Scientific Value |
| <input type="checkbox"/> Uniqueness/Heritage | <input type="checkbox"/> Visual Quality/Aesthetics |
| <input type="checkbox"/> Endangered Species Habitat | <input type="checkbox"/> Other |

Checklist:

- ☒ Wetland ID# B14.200.267-1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☐ Location of important wildlife sign.

WOSS
Data Form Examples
Segment 4

WET-146-04

Sam Hayden 5/14/17

Veg, soil, hydro good. Extended B-17-24-21-1 to entirely encompass this area.

C-17-64-24-2 Maine Power Reliability Project

Team C

WETLAND SUMMARY FORM

Observers: L. LECHER, D. GLENZMAN Date: 8-8-08
Town: LEWISTON Series: 1-16
Segment #: 139 CMP Section #: 10 CMP Pole #: 0 Wetland ID #: 1
Stream/Waterbody ID: NA Corps plot: Yes

Dominant NWI Class: PSS1E 100% Other NWI Classes:

Representative Wetland Vegetation (by Strata):

H/Rubpub Sh/Ac rub Sa/Fraper
Ecu syl Ile ver Ace rub
Car int T/Ac rub
Vib den Atha ang

Representative Wetland Hydrology

___ Permanently Flooded ___ Seasonally Flooded generally
(approximate depth -) (approximate depth - 2-0" X Saturated

Hydrologic Indicators: ___ Silt Deposition ___ X Water-Stained Leaves
___ Water Marks ___ Drift Lines ___ Surface Scouring
___ Drainage Patterns ___ Buttressed Trees ___ Elevated Roots

Other Observations: sat to soil surface

Representative
Wetland Soils:
X Mineral
___ Organic

Depth	Horizon	Color	Redox Features	Texture
0-6	A	25Y3/1		Sil
6-9+	B	25Y4/1	25Y5/6-10	Sil

Other Observations:
Meets NEIWPCC (2004) Criteria V

Stream # 1 Data:

Width (Bank-Bank): NA Depth @ Center: ___ Peren. ___ Intermittent ___
Bank Configuration: ___ Undercut ___ Vertical ___ Gradual
Channel Substrate: ___ Peat-Muck ___ Silt-Mud ___ Sand ___ Gravel/Cobble ___ Boulder
___ Bedrock

Stream # 2 Data:

Width (Bank-Bank): ___ Depth @ Center: ___ Peren. ___ Intermittent ___
Bank Configuration: ___ Undercut ___ Vertical ___ Gradual
Channel Substrate: ___ Peat-Muck ___ Silt-Mud ___ Sand ___ Gravel/Cobble ___ Boulder
___ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/ledges, browse, dens, egg masses, potential VP):

Notes:

___ Cedar Swamp

___ Wetland of Special Significance

Photo # P2 FACS

SKETCH ON BACK

Maine Power Reliability Project

Team 2

WET-

146-04

WETLAND SUMMARY FORM

Observers: MP AG MC Date: 10-17-07
 Town: Lewiston Series: OVER
 Segment #: 17 CMP Section #: 64 CMP Pole #: 24 Wetland ID #: 2
 Stream/Waterbody ID: _____ Corps plot: Yes ☒ No

Dominant NWI Class: P551

Other NWI Classes:

Representative Wetland Vegetation (by Strata):

ShrubLysichitonIlexSpartanSpilargisSagittariaJuncusKalimerisCalceolariaAlycaeusSpartanSWTgrassReb. hirs.

Representative Wetland Hydrology

☐ Permanently Flooded
 (approximate depth -)

☐ Seasonally Flooded
 (approximate depth -)

☒ Saturated
Hydrologic Indicators: ☐ Silt Deposition☐ Water Marks☐ Drift Lines☐ Water-Stained Leaves☐ Surface Scouring☒ Drainage Patterns☐ Buttressed Trees☐ Elevated Roots

Other Observations:

Wetland 10"

Representative Wetland Soils:

☒ Mineral☐ Organic

Depth	Horizon	Color	Redox Features	Texture
<u>0-6</u>	<u>A</u>	<u>5Y 2/1</u>	<u>-</u>	<u>Sa lo</u>
<u>6-12+</u>	<u>B1</u>	<u>5Y 6/1</u>	<u>5Y 7/1</u>	<u>Sa lo</u>

Other Observations:

Meets NEIWPCC (2004) Criteria VI

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____

Bank Configuration: ☐ Undercut ☒ Vertical ☐ GradualChannel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder☐ Bedrock

Stream # 2 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____

Bank Configuration: ☐ Undercut ☒ Vertical ☐ GradualChannel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder☐ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/ledges, browse, dens, egg masses,

potential VP):

POT V Por A Bt in Rots

Notes:

☐ Cedar Swamp☐ Wetland of Special Significance

Photo #

6/7

SKETCH ON BACK

Scum Hayden 5/19/17 Veg, soil, hydro growth. It extends S. and
 connects with B-17-64-24-1

S.H.

B-17-64-24-2

~~85-1761-241~~

WETLAND SKETCH

P45 Flcqr

Line Rerlag
Series
1-5

Positive Functions and Values:

- Groundwater Recharge/Discharge
- Fish and Shellfish Habitat
- Nutrient Removal
- Sediment/Shoreline Stabilization
- Recreation
- Underscore/Heritage
- Endangered Species Habitat

Climate:

- Wetland ID# 807-64-24.1
- North arrow
- Detailed sketch of wetland boundary and flagging sequence.
- Natural and man-made features - roads, culverts, outcrops, structures, etc.
- Propo locations.
- Location of important wildlife sign.

Floodflow Alteration

- Sediment/Tortuosity Retention
- Production Export
- Wildlife Habitat
- Educational/Scientific Value
- Visual Quality/Aesthetics
- Other

54.

[illegible]

Substratum of photo of soil is circled				
DEPTH	HORIZON	WATER COLOR	GEOMORPHIC FEATURES (see instructions on drawing)	COMMENTS (soil texture, color, smell, root distribution, etc.)
0-6	A ₁	5Y 3/2	—	Silt
6-10 +	B ₁	5Y 4/2	5Y 5/1 5Y 5/2 0.5 cm ± 1.5 b	Silt

HYDROLOGIC SOIL INFORMATION

III NE Hydric Soil

OPTIONAL SOIL DATA

REFERENCES:

REFERENCES:

CONCLUSIONS

<p>Hydrologic vegetation criterion met? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Hydrologic criterion met? <input checked="" type="checkbox"/></p> <p>Water table hydrology criterion met? <input checked="" type="checkbox"/></p> <p>Soil has data point in a wetland? <input checked="" type="checkbox"/></p>	<p>REMARKS:</p>
---	------------------------

PROJECT TITLE: M PEP

DATE: 11/11/01

B17-64-24-1-106A

C-17-64-24-2 Maine Power Reliability Project

Team C

WETLAND SUMMARY FORM

Observers: L. LECHE & D. LENNEMAN Date: 8-8-08Town: LEWISTON Series: 1-16Segment #: 139 CMP Section #: 10 CMP Pole #: 0 Wetland ID #: 1Stream/Waterbody ID: NA Corps plot: YesDominant NWI Class: PSS1E 100% Other NWI Classes:

Representative Wetland Vegetation (by Strata):

H/Rubpub SH/Acerub Sa/Fraper
 Equisyl Ilver Acerub
 Carint T/Acerub
 Vibden Athary

Representative Wetland Hydrology

☐ Permanently Flooded
 (approximate depth -)

☒ Seasonally Flooded
 (approximate depth - 2-6")

 generally
☒ Saturated
Hydrologic Indicators: ☐ Silt Deposition ☒

Water-Stained Leaves

☐ Water Marks ☐ Drift Lines

Surface Scouring

☐ Drainage Patterns☐ Buttressed Trees☒ Elevated RootsOther Observations: sat to soil surface

Representative

Wetland Soils:

☒ Mineral☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-6	A	25Y3/2		S:L
6-9+	B	25Y4/2	25Y5/6-10p	S:L

Other Observations:

Meets NEIWPCC (2004) Criteria VI

Stream # 1 Data:

Width (Bank-Bank): NA Depth @ Center: _____ Peren. _____ Intermittent _____

Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____

Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____ Bedrock _____

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____

Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____

Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____ Bedrock _____

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

Notes:

Cedar Swamp

Wetland of Special Significance

Photo # (P2) Falls

SKETCH ON BACK

WETLAND SKETCH

Line Flagging Series
1-16



C139-10-0-1-1



Possible Functions and Values:

- | | |
|---|---|
| <input type="checkbox"/> Groundwater Recharge/Discharge | <input type="checkbox"/> Floodflow Alteration |
| <input type="checkbox"/> Fish and Shellfish Habitat | <input type="checkbox"/> Sediment/Toxicant Retention |
| <input type="checkbox"/> Nutrient Removal | <input type="checkbox"/> Production Export |
| <input type="checkbox"/> Sediment/Shoreline Stabilization | <input checked="" type="checkbox"/> Wildlife Habitat |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Educational/Scientific Value |
| <input type="checkbox"/> Uniqueness/Heritage | <input type="checkbox"/> Visual Quality/Aesthetics |
| <input type="checkbox"/> Endangered Species Habitat | <input type="checkbox"/> Other |

Checklist:

- ☒ Wetland ID# C139-10-0-1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features – roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☒ Location of important wildlife sign.

WET-152-01

Sam Hayden 5/21/17

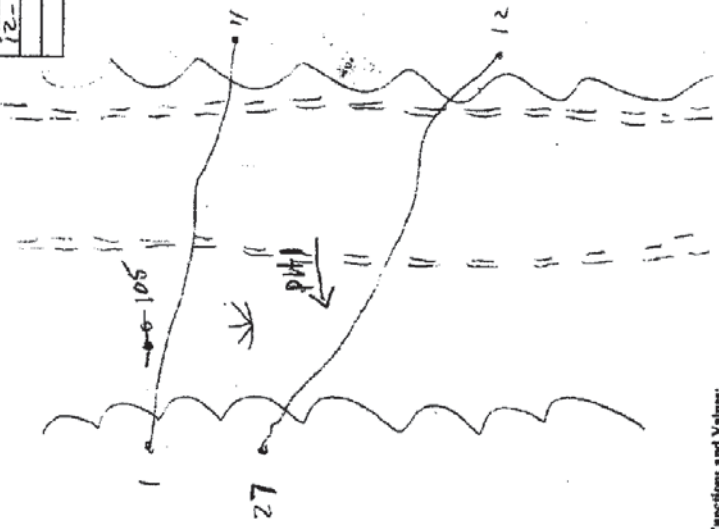
veg. soil. hydro good
auto N boundary

Added section
SH

B-17-64-105-1

PHZ flag WETLAND SKETCH

Line Flagging Series
1-11
12-27



- Possible Functions and Values:
- ☐ Groundwater Recharge/Discharge
 - ☐ Fish and Shellfish Habitat
 - ☐ Nutrient Removal
 - ☐ Sediment/Shoreline Stabilization
 - ☐ Recreation
 - ☐ Unique/Heritage
 - ☐ Endangered Species Habitat
 - ☐ Floodflow Alteration
 - ☐ Sediment/Toxicant Retention
 - ☐ Production Export
 - ☐ Wildlife Habitat
 - ☐ Educational/Scientific Value
 - ☐ Visual Quality/Aesthetics
 - ☐ Other

Checklist: Wetland ID# 817-64-105-1

- ☐ North arrow
- ☐ Detailed sketch of wetland boundary and flagging sequence
- ☐ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☐ Photo locations
- ☐ Location of important wildlife signs

MAINE POWER REIMBURSEMENT PROJECT

WETLAND SUMMARY FORM

Observer: SE AGC Date: 10/25/07
Town: SE AGC Series: 01068
Segment #: 17 CMP Section #: 64 CMP Plot #: 105 Wetland #: 1
Stream/Waterbody ID: 105 Corps plot: Yes No

Dominant NWI Class: PEM1 Other NWI Classes: PFO1
Representative Wetland Vegetation (by Strata):
Sci Cyp ONP dens cany/ies Shrub Bar/par
Can lat Jun com Phalaris Spi als elm tree
Can Crim Spr tam Phalaris the ven Ac ny
Solog thy lat Min rug Agival
Thelp city can vib dent

Representative Wetland Hydrology:
☐ Permanently Flooded (approximate depth -) ☒ Seasonally Flooded (approximate depth - 2 ft) ☐ Saturated
Hydrologic Indicators: ☒ Silt Deposition ☒ Water-Stained Leaves ☒ Surface Scouring
Water Marks ☒ Drift Lines ☒ Buried Trees ☒ Elevated Roots
Drainage Patterns ☒ Other Observations: Saturated 6-8 ft

Representative Wetland Soil:	Depth	Horizon	Color	Texture	Test
<input checked="" type="checkbox"/> Mineral	<u>0-12 in</u>	<u>10A</u>	<u>gray</u>	<u>fine</u>	<u>silty</u>
<input type="checkbox"/> Organic					

Other Observations: Wetland is apparent

Stream # 1 Data:
Width (Bank-Bank): 10 ft Depth @ Center: 10 ft Perms: Intermittent
Bank Configuration: Vertical Undercut: Gravel
Channel Substrate: Peat-Muck Silt-Mud Sand Gravel/Cobble Boulder

Stream # 2 Data:
Width (Bank-Bank): 10 ft Depth @ Center: 10 ft Perms: Intermittent
Bank Configuration: Vertical Undercut: Gravel
Channel Substrate: Peat-Muck Silt-Mud Sand Gravel/Cobble Boulder

Wildlife Observations/Signs (e.g. tracks/prints, droppings, dens/nests, burrows, dens, egg masses, potential VP):

Notes:

Photo # 112
Sketch on Back

WETLAND SUMMARY FORM

Observers: SE, AG, MC Date: 10/25/07
 Town: Lewiston Series: OVER
 Segment #: 17 CMP Section #: 64 CMP Pole #: 105 Wetland #: 1
 Stream/Waterbody ID: Corps plot: Yes ☒ No

Dominant NWI Class: PEM1 Other NWI Classes: PFO1

Representative Wetland Vegetation (by Strata):

<u>Sci Cyp</u>	<u>ONB SENG</u>	<u>COTW965</u>	<u>Shrub</u>	<u>Bet pop</u>
<u>Can luf</u>	<u>Juw cam</u>	<u>Phalaru</u>	<u>Spr arb</u>	<u>Ulm Amer</u>
<u>Can Crin</u>	<u>Spartan</u>	<u>Pol Sag</u>	<u>Ile ver</u>	<u>Acer n</u>
<u>Sol gog</u>	<u>thylat</u>		<u>Aln rug</u>	<u>Alibul</u>
<u>Thel pal</u>	<u>Ally can</u>		<u>v.b dent</u>	

Representative Wetland Hydrology

☐ Permanently Flooded (approximate depth -) ☒ Seasonally Flooded (approximate depth - 2") ☐ Saturated

Hydrologic Indicators: ☐ Silt Deposition ☐ Water-Stained Leaves
☒ Water Marks ☐ Drift Lines ☒ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots

Other Observations: Saturated 6-8"

Representative Wetland Soils:
☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
<u>0-12"</u>	<u>B₁₁</u>	<u>5Y5/2</u>	<u>10YR4/6</u>	<u>S:Lo</u>
			<u>29Y5/1</u>	

Other Observations:
 Meets NEIWPCC (2004) Criteria VI W apparent "A"

Stream # 1 Data:

Width (Bank-Bank): Depth @ Center: Peren. ☒ Intermittent ☐
 Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
 Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Stream # 2 Data

Width (Bank-Bank): Depth @ Center: Peren. ☒ Intermittent ☐
 Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
 Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

Notes:

☐ Cedar Swamp

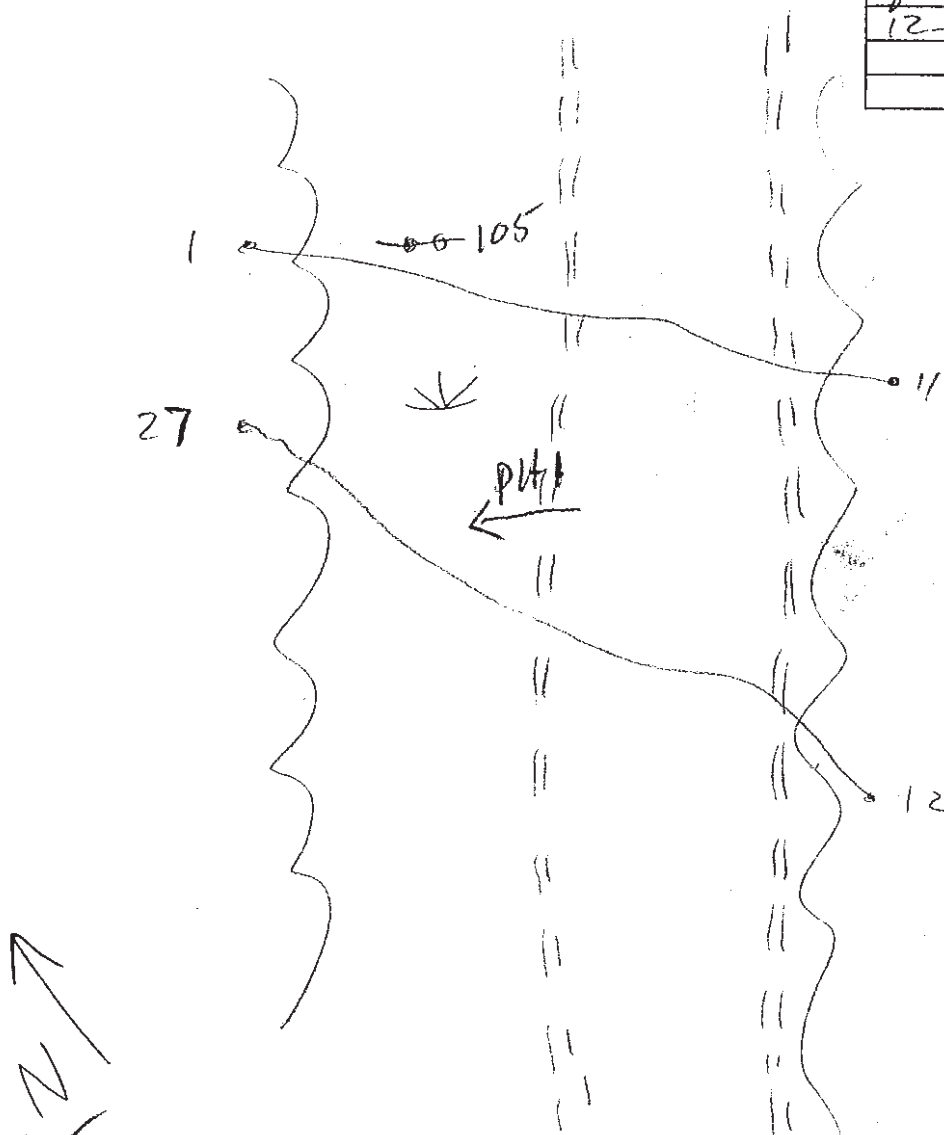
☐ Wetland of Special Significance

Photo # 1/2

SKETCH ON BACK

PltZ *flag* WETLAND SKETCH

Line Flagging Series
1-11
12-27



Possible Functions and Values:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Groundwater Recharge/Discharge | <input type="checkbox"/> Floodflow Alteration |
| <input type="checkbox"/> Fish and Shellfish Habitat | <input type="checkbox"/> Sediment/Toxicant Retention |
| <input type="checkbox"/> Nutrient Removal | <input type="checkbox"/> Production Export |
| <input type="checkbox"/> Sediment/Shoreline Stabilization | <input type="checkbox"/> Wildlife Habitat |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Educational/Scientific Value |
| <input type="checkbox"/> Uniqueness/Heritage | <input type="checkbox"/> Visual Quality/Aesthetics |
| <input type="checkbox"/> Endangered Species Habitat | <input type="checkbox"/> Other |

Checklist:

- ☒ Wetland ID# B17-64-105-1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☒ Location of important wildlife sign.

Sam Hayden 5/23/17 WET-155-03

veg, soil, hydro, delineation good. S.H.

~~P3-17-64-148-1~~

WET-155-03

Observer: AK MC WETLAND SUMMARY FORM Date: 10/30/07
Town: Leicester Series: 0158
Segment #: 17 CMP Section #: 884 CMP Pole #: 158 Wetland #: 1
Stratum/Method ID: _____ Core plot: ✓ Yes ✓ No
Dominant NVC Class: P6a1 Other NVC Classes: _____

phalaris verbas (s) sci cup (s)
bit 80-111
Bdly Arise can lac
bit egg can lac

Representative Wetland Hydrology
Permanently Flooded ✓ Seasonally Flooded _____
(approximate depth: _____) (approximate depth: 6")
Hydrologic Indicator: _____ Soil Deposition _____
Water Marks _____ Drift Lines _____
Disturbance Patterns _____ Burrowed Trees _____ Bayward Floes _____
Other Observations: _____

Representative Wetland Soils	Depth	Elevation	Color	Redox Potential	Testers
Mineral	<u>0-6</u>	<u>4</u>	<u>5Y 3/2</u>	<u>5-10</u>	<u>5-10</u>
Organic	<u>6-12</u>	<u>3</u>	<u>5Y 4/1</u>	<u>4.5-6</u>	<u>4.5-6</u>

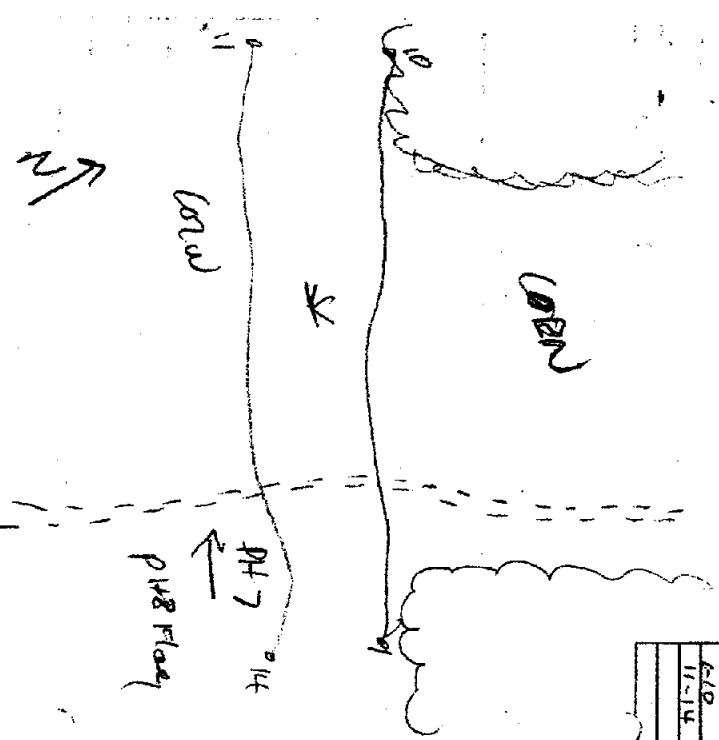
Other Observations: III
Mosses/NVC/C (2004) Criteria: _____
Stream # 1 Data: _____
Wetland Bank-Bank: _____ Depth @ Center: _____
Bank Configuration: _____ Undercut _____ Vertical _____
Channel Substrate: _____ Pool-Muck _____ Silty-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
Stream # 2 Data: _____
Wetland Bank-Bank: _____ Depth @ Center: _____
Bank Configuration: _____ Undercut _____ Vertical _____
Channel Substrate: _____ Pool-Muck _____ Silty-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
Bedrock _____
Visible Observations/Sign (e.g., mounds, droppings, burrows, logs, brown, dark, egg masses, potential VPs): _____

Apr 18 Swale

Notes:

Photo # 7/8 CV Wetland of Special Significance ✓
Sketch on Back

WETLAND SKETCH



- Possible Functions and Values:
- Groundwater Recharge/Discharge
 - Fish and Shellfish Habitat
 - Nutrient Removal
 - Sediment/Sludge Stabilization
 - Recreation
 - Uniqueness/Rarity
 - Rare/Endangered Species Habitat
 - Foodflow Alternatives
 - Sediment/Tortoise Retention
 - Production Support
 - Wildlife Habitat
 - Educational/Scientific Value
 - Visual Quality/Aesthetics
 - Other
- Questions: _____
Wetland ID# 817-64-148-1
North arrow: _____
Detailed sketch of wetland boundary and flagging sequence.
Natural and man-made features - roads, culverts, outcrops, structures, etc.
Photo locations: _____
Locations of important wildlife signs: _____

Field conditions match plot data. 5/46

[illegible][illegible]

617-64-148-1-UKT

[illegible]

B17-64-148-1-422

WETLAND SUMMARY FORM

Observers: AG MC Date: 10/30/07
 Town: Lewiston Series: 026R
 Segment #: 17 CMP Section #: 64 CMP Pole #: 148 Wetland #: 1
 Stream/Waterbody ID: _____ Corps plot: ☒ Yes ☐ No

Dominant NWI Class: Pem1

Other NWI Classes:

Representative Wetland Vegetation (by Strata):

Phalaris ⁽⁸⁵⁾
Let soil ⁽¹⁵⁾
Baby Aster ⁽¹⁵⁾
Jun eff
Ver hast ⁽⁵⁾
Scaypo ⁽⁵⁾
Can lac
Can luv

Representative Wetland Hydrology

☐ Permanently Flooded (approximate depth -) ☒ Seasonally Flooded (approximate depth - 6") ☐ Saturated

Hydrologic Indicators: ☐ Silt Deposition ☐ Water-Stained Leaves
☐ Water Marks ☐ Drift Lines ☒ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots

Other Observations:

Representative Wetland Soils:

☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
<u>0-6</u>	<u>A₁</u>	<u>5Y 3/2</u>		<u>Salo</u>
<u>6-12+</u>	<u>B₁</u>	<u>5Y 4/1</u>	<u>5Y 5/1</u>	<u>Silo</u>
			<u>2.5cm</u>	
			<u>2.5%</u>	

Other Observations:

Meets NEIWPCC (2004) Criteria VI

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: ☒ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Stream # 2 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: ☒ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

Agroc Swale

Notes:

☐ Cedar Swamp

☐ Wetland of Special Significance

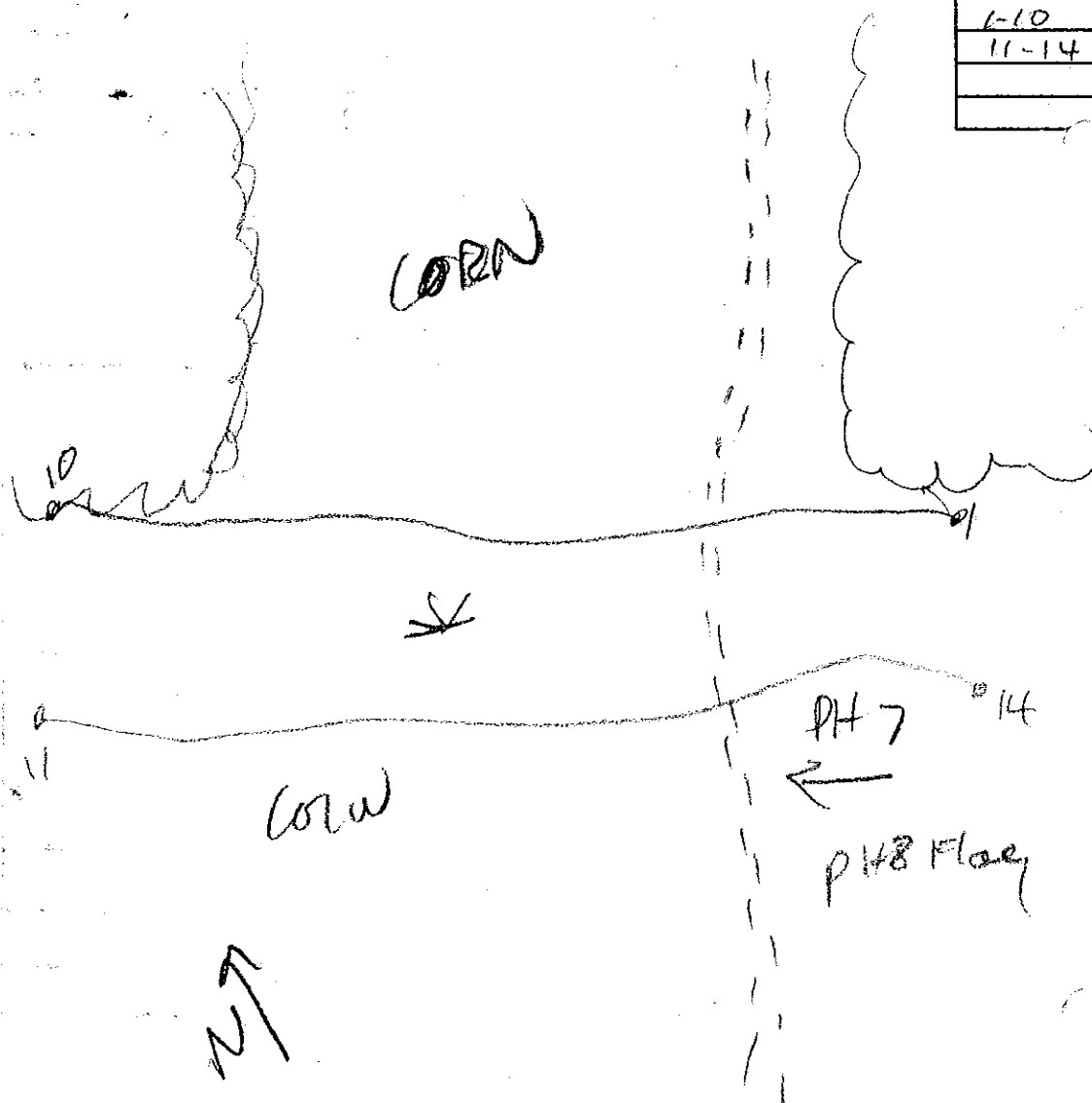
Photo #

7/8

SKETCH ON BACK

WETLAND SKETCH

Line Flagging Series
1-10
11-14



Possible Functions and Values:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Groundwater Recharge/Discharge | <input type="checkbox"/> Floodflow Alteration |
| <input type="checkbox"/> Fish and Shellfish Habitat | <input type="checkbox"/> Sediment/Toxicant Retention |
| <input type="checkbox"/> Nutrient Removal | <input type="checkbox"/> Production Export |
| <input type="checkbox"/> Sediment/Shoreline Stabilization | <input type="checkbox"/> Wildlife Habitat |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Educational/Scientific Value |
| <input type="checkbox"/> Uniqueness/Heritage | <input type="checkbox"/> Visual Quality/Aesthetics |
| <input type="checkbox"/> Endangered Species Habitat | <input type="checkbox"/> Other |

Checklist:

- ☒ Wetland ID# B17-64-148-1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☒ Location of important wildlife sign

D11 DT-170 1 004

PROJECT TITLE: MAP TRANSECT: _____ PLOT: _____

DELINEATOR(S): AL ME DATE: 10-30-07

VEGETATION	Stratum and Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
<u>Hers</u>					
<u>Phal ann</u>		<u>85</u>	<u>85/105</u>	<u>82</u>	<u>RACW</u>
<u>Lyt Gal</u>		<u>5</u>	<u>5/105</u>	<u>5</u>	
<u>Bushy Aster</u>		<u>5</u>	<u>5/105</u>	<u>5</u>	
<u>Ver hast</u>		<u>5</u>	<u>5/105</u>	<u>5</u>	
<u>Scir cy p</u>		<u>5</u>	<u>5/105</u>	<u>5</u>	

HYDROPHYTES				NON-HYDROPHYTES		
OBL	FACW	FAC	OTHER	FAC	FACU	UPL
Hydrophytes Subtotal (A): <u>1</u>				Non-hydrophytes Subtotal (B): <u>0</u>		
PERCENT HYDROPHYTES (100A/A+B): <u>1/1 = 100%</u>						

HYDROLOGY

☐ RECORDED DATA
 Stream, lake, or tidal gage Identification: _____
 Aerial photography Identification: _____
 Other Identification: _____

☒ NO RECORDED DATA

☐ OBSERVATIONS:
 Depth to Free Water: @ surface
 Depth to Saturation (including capillary fringe): _____
 Altered Hydrology (explain): _____

☐ Inundated
 ☒ Saturated in upper 12"
 ☐ Water Marks
 ☐ Drift Lines
 ☐ Sediment Deposits
 ☒ Drainage Patterns within Wetland

☐ OTHER (explain): _____

CENPE CO-R-PT Version 7/9/00 Page 1

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.)
0-6	A	5Y3/2		SaLo
6-12 +	B ₁	5Y4/1	5Y4.5/1 L.5CM ±10%	SiLo

HYDRIC SOIL INDICATOR(S):

REFERENCE(S):

VI NE Hydric Soils

OPTIONAL SOIL DATA

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

Depth to active water table:

NTCHS hydric soil criterion:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation criterion met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Hydric soils criterion met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Wetland hydrology criterion met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
IS THIS DATAPOINT IN A WETLAND?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

CENAE-COR-PT Version 7/100 Page 2

PROJECT TITLE:

MPP

TRANSECT:

PLOT:

817-64-148-1-WET

PROJECT TITLE: MRRP TRANSECT: _____ PLOT: _____

DELINEATOR(S): _____ DATE: 10/30/07

VEGETATION	Stratum and Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
<u>Shrub</u>					
	Storw Sumac	65	65/65	100	✓ upl
<u>Herb</u>					
	phalaris	20	20/45	43	✓ R2C W
	solcan	10	10/45	21	✓ R2C W
	sol rug	5	5/45	5	
	Swt veru 91	10	10/45	21	✓ R2C W

HYDROPHYTES				NON-HYDROPHYTES		
OBL	FACW	FAC	OTHER	FAC	FACU	UPL
Hydrophytes Subtotal (A): <u>1</u>				Non-hydrophytes Subtotal (B): <u>3</u>		
PERCENT HYDROPHYTES (100A/A+B): <u>1/4 = 25%</u>						

HYDROLOGY Hillside / Knoll

☐ RECORDED DATA
 Stream, lake, or tidal gage Identification: _____
 Aerial photography Identification: _____
 Other Identification: _____

☒ NO RECORDED DATA

☐ OBSERVATIONS:
 Depth to Free Water: _____
 Depth to Saturation (including capillary fringe): _____
 Altered Hydrology (explain): _____

☐ Inundated ☐ Saturated in upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns within Wetland

☐ OTHER (explain): N/A

CENVE-CO-RPT, Version 7/1/03 Page 1

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.)
0-6	A ₁	10YR 3/2	-	Salo
6-18	B ₁	10YR 6/6		Salo

HYDRIC SOIL INDICATOR(S):

REFERENCE(S):

N/A

OPTIONAL SOIL DATA

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

Depth to active water table:

NTCHS hydric soil criterion:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation criterion met?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Hydric soils criterion met?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Wetland hydrology criterion met?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
IS THIS DATAPOINT IN A WETLAND?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

CENAE COR-PT Version 7/100 Page 2

PROJECT TITLE:

MPRP

TRANSECT:

PLOT:

B17-64-148-1-URP

WETLAND SUMMARY FORM

Observers: Galka/Boothby Date: 10/18/07
 Town: Durham Series: 1-13, 14, 28, 39-82, 23-190
 Segment #: 17 CMP Section #: 62 CMP Pole #: 99 Wetland ID #: 017-62-99-1
 Stream/Waterbody ID: N/A Corps plot: Yes ☒ No

Dominant NWI Class: PEM1GSPOther NWI Classes: PS1, 207b

Representative Wetland Vegetation (by Strata):

Herbs

Scirpus
Tan off
Car. sed.
Car. vul.
Spring. spp.
Ver. has.

Bugleweed
Rub. his.
Eut. gra.

Shrubs

Ath. inc.
Spir. lot.
Ace. rub.
Maleberry

Trees

Ace. rub.
Rubi. bal.

14% 100%
Y4

Representative Wetland Hydrology

☐ Permanently Flooded
 (approximate depth -)

☐ Seasonally Flooded
 (approximate depth -)

☒ Saturated

Hydrologic Indicators: ☐ Silt Deposition☒

Water-Stained Leaves

☐ Water Marks☐ Drift Lines

Surface Scouring

☐ Drainage Patterns☐ Buttressed Trees☐ Elevated Roots

Other Observations:

Some sections of wetland inundated w/ 1-3" of standing H₂O

Representative

Wetland Soils:

☒ Mineral☐ Organic

Depth	Horizon	Color	Redox Features	Texture
8-0	Oi	-	-	SAPIC
0-7	A	10YR 2/1	10YR 3/4	Mucky
4-18+	Bt	10YR 4/1	10YR 3/6	Clay

Other Observations:

Meets NEIWPCC (2004) Criteria

XI WATER @ 6"

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____

Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____

Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
 _____ Bedrock

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____

Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____

Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
 _____ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

Deer sign

Notes:

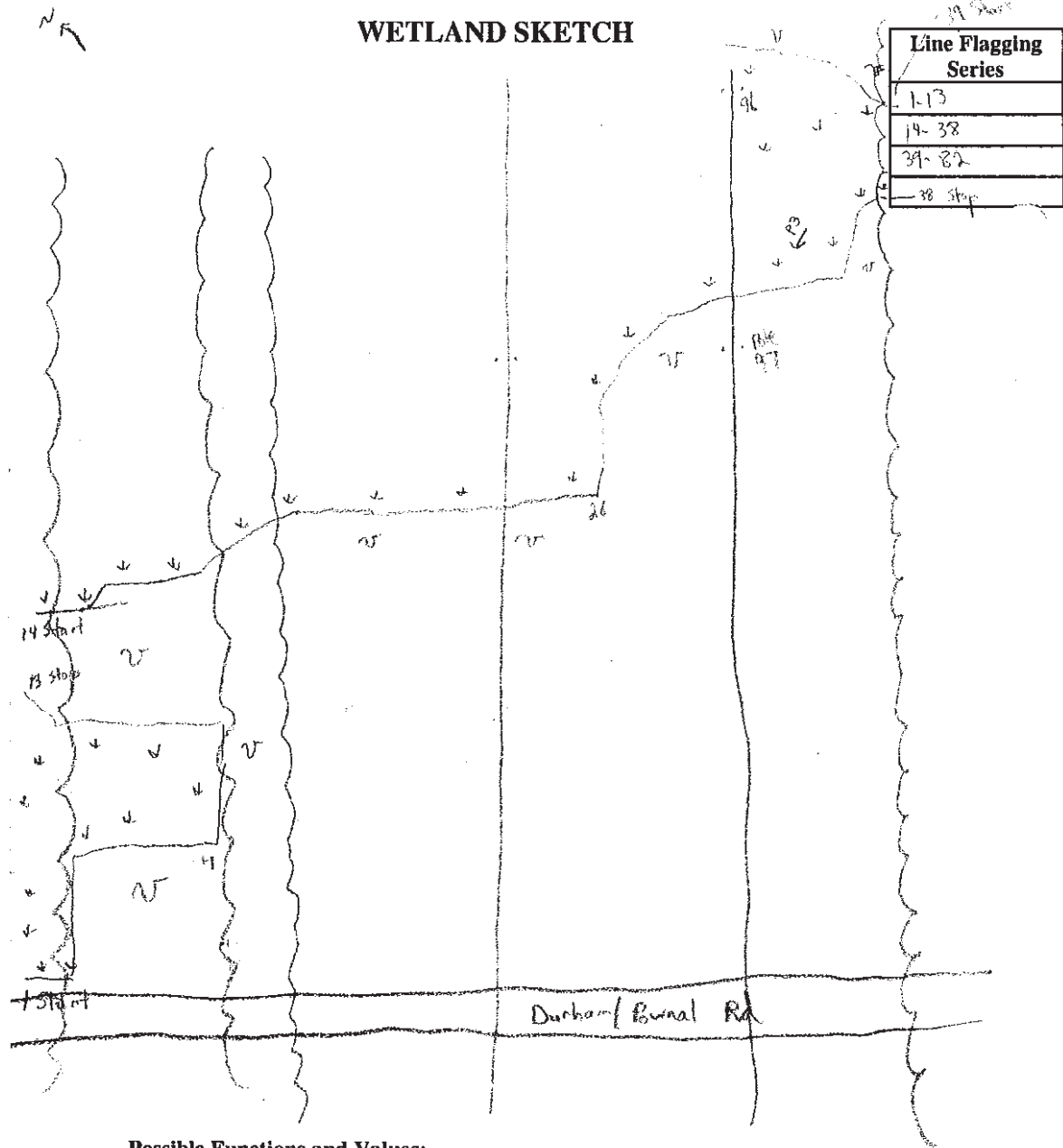
Wetland receives hydrology from Pennell/Durham
 Rd at road crossing.
 Large wetland complex stretching for many miles

☐ Cedar Swamp☐ Wetland of Special Significance

Photo # _____

P 3 x WL SW

SKETCH ON BACK



Possible Functions and Values:

- | | |
|---|---|
| <input type="checkbox"/> Groundwater Recharge/Discharge | <input type="checkbox"/> Floodflow Alteration |
| <input type="checkbox"/> Fish and Shellfish Habitat | <input type="checkbox"/> Sediment/Toxicant Retention |
| <input type="checkbox"/> Nutrient Removal | <input type="checkbox"/> Production Export |
| <input type="checkbox"/> Sediment/Shoreline Stabilization | <input checked="" type="checkbox"/> Wildlife Habitat |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Educational/Scientific Value |
| <input type="checkbox"/> Uniqueness/Heritage | <input type="checkbox"/> Visual Quality/Aesthetics |
| <input type="checkbox"/> Endangered Species Habitat | <input type="checkbox"/> Other |

Checklist:

- | | |
|-------------------------------------|---|
| <input checked="" type="checkbox"/> | Wetland ID# <u>D17-62-99-1</u> |
| <input checked="" type="checkbox"/> | North arrow. |
| <input checked="" type="checkbox"/> | Detailed sketch of wetland boundary and flagging sequence. |
| <input checked="" type="checkbox"/> | Natural and man-made features – roads, culverts, outcrops, structures, etc. |
| <input checked="" type="checkbox"/> | Photo locations. |
| <input type="checkbox"/> | Location of important wildlife sign. |

WOSS
Data Form Examples
Segment 5

6-10-67-4221
Maxey's SUB
check

Maine Power Reliability Project WETLAND SUMMARY FORM

Boyle
Team C

Observers: RES TLD Date: 14 NOV 2008
Town: WINDSOR Series: 388 Back Mtns
Segment #: 10 CMP Section #: 67 CMP Pole #: 422 Wetland #: 1
Stream/Waterbody ID: 1 Corps plot: X Yes No

Dominant NWI Class: Pemie 80 PROZE 10 Other NWI Classes: PSSIE 10

Representative Wetland Vegetation (by Strata):

I
Acer
Frax
Abies

SL
Alnus
Ilex
Vib. cassin.

H
Ostrya
Quercus
Tilia
Corylus

Representative Wetland Hydrology

Permanent Flooded X Seasonally Flooded X Saturated
(approximate depth -) (approximate depth - 12")

Hydrologic Indicators: Water Marks X Silt Deposition X Water-Stained Leaves
Drainage Patterns X Drift Lines X Surface Scouring
Buttressed Trees X Elevated Roots

Other Observations: splay now, splay to 100"

Representative
Wetland Soils:
Mineral
Organic

Depth	Horizon	Color	Redox Features	Texture
0-8	Ap	2.5 y/1	5% COAC	S/L
8-20+	Bg	G1 4/1	40% COAC	S/L

Other Observations:
Meets NEIWPCC (2004) Criteria

Stream # 1 Data: 6-10' Depth @ Center: 3' Peren. X Intermittent
Width (Bank-Bank): Undercut Vertical X Gradual
Bank Configuration: Peat-Muck Silt-Mud 30 Sand Gravel/Cobble Boulder
Channel Substrate: Bedrock

Stream # 2 Data
Width (Bank-Bank): Depth @ Center: Peren. Intermittent
Bank Configuration: Undercut Vertical Gradual
Channel Substrate: Peat-Muck Silt-Mud Sand Gravel/Cobble Boulder
 Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP): Deer sign, dead porcupine

Notes: Re collection of data for Maxey's

☐ Cedar Swamp NO ☐ Wetland of Special Significance yes

Photo # 462-7

SKETCH ON BACK

WETLAND SKETCH



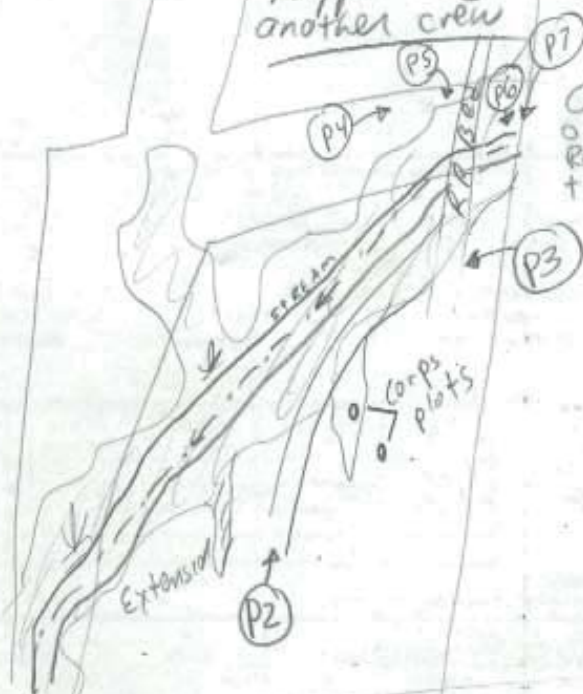
PREVIOUSLY
mapped by
another crew

Line Flagging Series
SEE G-13

EXTENSIONS

old x19-17.1-175-
012X20

OBS. Points
on old
Road Bed fill
through ↓



Possible Functions and Values:

- ☒ Groundwater Recharge/Discharge
- ☒ Fish and Shellfish Habitat
- ☒ Nutrient Removal
- ☒ Sediment/Shoreline Stabilization
- ☐ Recreation
- ☐ Uniqueness/Heritage
- ☐ Endangered Species Habitat

- ☒ Floodflow Alteration
- ☒ Sediment/Toxicant Retention
- ☒ Production Export
- ☒ Wildlife Habitat
- ☐ Educational/Scientific Value
- ☐ Visual Quality/Aesthetics
- ☐ Other

Checklist:

- ☒ Wetland ID# G-10-67-422-1
- ☐ North arrow.
- ☐ Detailed sketch of wetland boundary and flagging sequence.
- ☐ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☐ Photo locations.
- ☐ Location of important wildlife sign.

**Maine Power Reliability Project
WETLAND SUMMARY FORM**

Team A

Observers: DWP, CCD, KTW Date: 9/5/07
 Town: WHITEFIELD Series: 1-10; 11-34, 35-40, 41-
 Segment #: 11 CMP Section #: 392 CMP Pole #: 183 Wetland ID #: 1
 Stream/Waterbody ID: _____ Corps plot: (Yes) (No)

Dominant NWI Class: PEM1

Other NWI Classes: PSSI

Representative Wetland Vegetation (by Strata):

shrubs
Rho gro
spi tom
Aln inc (scattered)

Herbs
Sci spp Gly can
Carex spp Lythrum
Eup spp salicarea
Doe umb
Cal can

Representative Wetland Hydrology

☐ Permanently Flooded (approximate depth -) ☒ Seasonally Flooded (approximate depth -) ☒ Saturated

Hydrologic Indicators: ☒ Silt Deposition ☐ Water-Stained Leaves
☒ Water Marks ☐ Drift Lines ☐ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots
 Other Observations: _____

Representative Wetland Soils:

☐ Mineral
☒ Organic

Depth	Horizon	Color	Redox Features	Texture
0-16	0a	10YR2/2		MUCK

Other Observations:

Meets NEIWPCC (2004) Criteria III Taken near #9

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
 _____ Bedrock

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
 _____ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

Osprey nest on Pole #176

Notes: _____

☐ Cedar Swamp

☒ Wetland of Special Significance

Photo # 111

N

WETLAND SKETCH

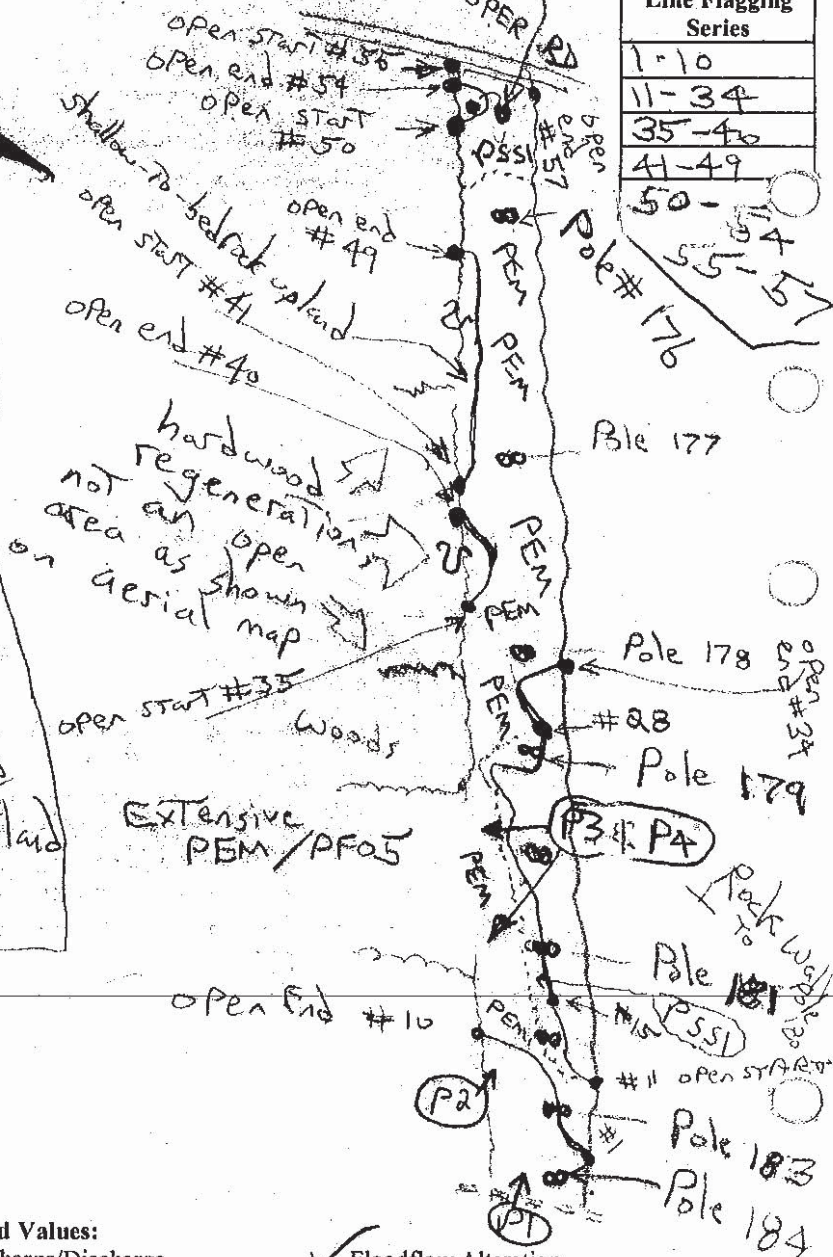
ALOE DATA FORMS

Line Flagging Series

Line Flagging Series
1-10
11-34
35-40
41-49
50-54
55-57

DUP

Note:
A PSS1 tends to exist on the Northern edge of the wetland; a PEM on its other side as shown by dotted line in the wetland sketch



Possible Functions and Values:

- ☒ Groundwater Recharge/Discharge
- ☐ Fish and Shellfish Habitat
- ☒ Nutrient Removal
- ☐ Sediment/Shoreline Stabilization
- ☐ Recreation
- ☐ Uniqueness/Heritage
- ☐ Endangered Species Habitat

- ☒ Floodflow Alteration
- ☒ Sediment/Toxicant Retention
- ☐ Production Export
- ☒ Wildlife Habitat
- ☐ Educational/Scientific Value
- ☐ Visual Quality/Aesthetics
- ☐ Other

Checklist:

- ☒ Wetland ID# A11-392-183-1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☐ Photo locations.
- ☐ Location of important wildlife sign.

Maine Power Reliability Project

Team A

WETLAND SUMMARY FORM

Observers: DUP, C.D., KWDate: 10/11/07Town: WHITEFIELDSeries: 1-9, 16-36, 37-47, 48Segment #: 11CMP Section #: 392CMP Pole #: 161Wetland #: 1Stream/Waterbody ID: A11-392-161-1-CH1Corps plot: Yes ☒ No ☐Dominant NWI Class: PSS1

Other NWI Classes:

Representative Wetland Vegetation (by Strata):

PSS1Ah inc (s)Cic macSambucus spSci cyp (h)Eupatorium spSci macGly canGly strEup graCar gynSolidagoBro cilSym lanTyp latspp Cal can

Representative Wetland Hydrology

☐ Permanently Flooded
(approximate depth -)☐ Seasonally Flooded
(approximate depth -)☒ SaturatedHydrologic Indicators: ☐ Silt Deposition☒ Water-Stained Leaves☒ Water Marks☐ Drift Lines☒ Surface Scouring☐ Drainage Patterns☐ Buttressed Trees☐ Elevated Roots

Other Observations:

Representative
Wetland Soils:☒ Mineral☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-4	10YR4/2	Ap	None	S/L
4-10	Bg	2.5Y4/1	CMF 2.5Y5/1	S/L
10-14+	Cg	5Y3/1	-	S/L

Other Observations:

Meets NEIWPCC (2004) Criteria XIII"Problem Area" (no Ah horizon)

Stream # 1 Data:

Width (Bank-Bank): 2' Depth @ Center: 6" Peren. ☐ Intermittent ☒Bank Configuration: ☒ Undercut ☐ Vertical☒ GradualChannel Substrate: ☐ Peat-Muck ☒ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Stream # 2 Data

Width (Bank-Bank): 1' Depth @ Center: 6" Peren. ☐ Intermittent ☒Bank Configuration: ☐ Undercut ☒ Vertical☐ GradualChannel Substrate: ☐ Peat-Muck ☒ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

deer sign, osprey nest on Pole,

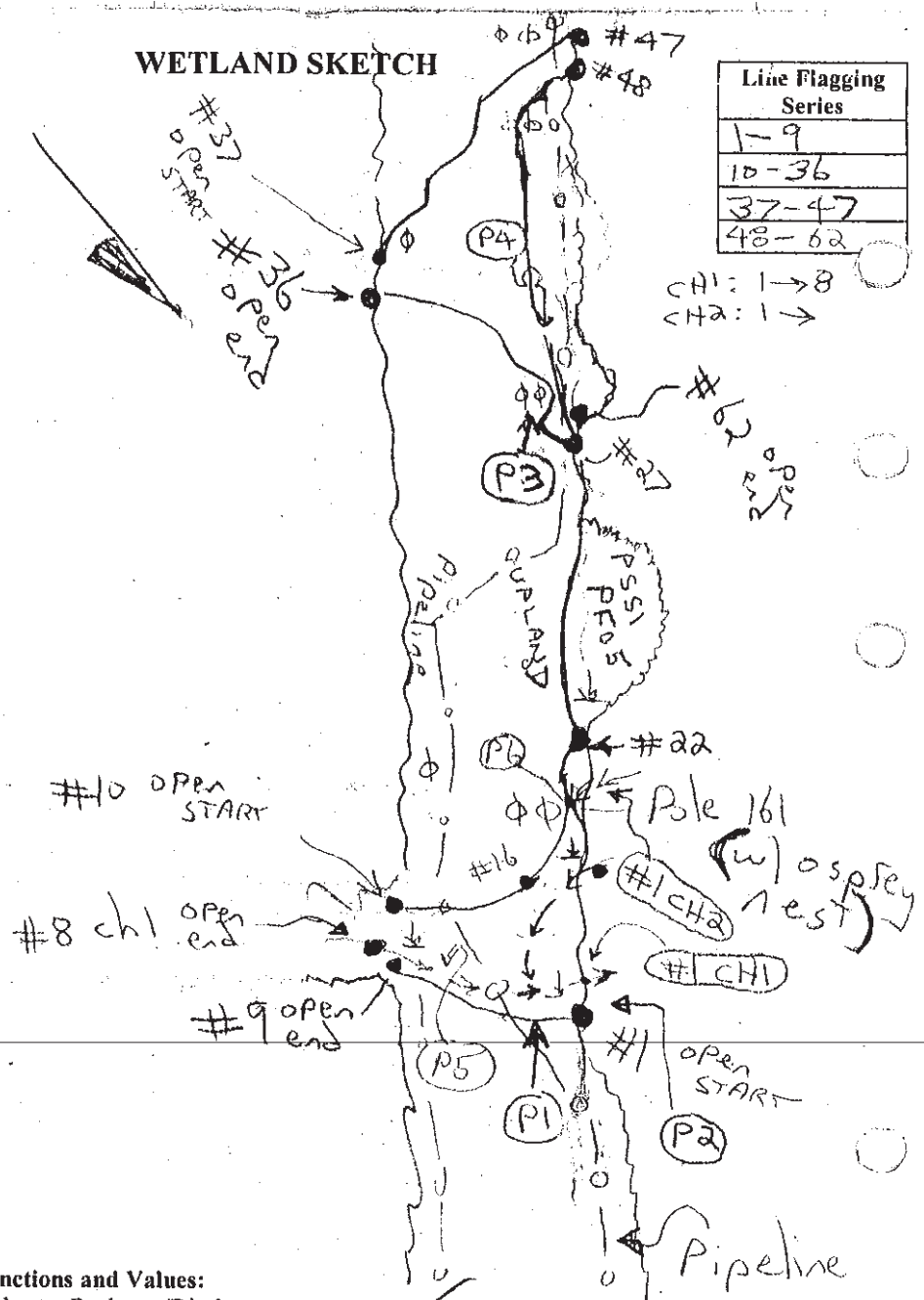
Notes:

☐ Cedar Swamp☒ Wetland of Special Significance

Photo #

A + 2 stream n.l.tos (nab)

N
Dwp

$$\begin{aligned} CH1: & 1 \rightarrow 8 \\ CH2: & 1 \rightarrow \end{aligned}$$


- ___ Groundwater Recharge/Discharge
- ___ Fish and Shellfish Habitat
- ___ Nutrient Removal
- ___ Sediment/Shoreline Stabilization
- ___ Recreation
- ___ Uniqueness/Heritage
- ___ Endangered Species Habitat

- ☒ Floodflow Alteration
- ☒ Sediment/Toxicant Retention
- ☒ Production Export
- ☒ Wildlife Habitat
- ☐ Educational/Scientific Value
- ☐ Visual Quality/Aesthetics
- ☐ Other

- ☒ Wetland ID# 141-392-161-1-1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☐ Location of important wildlife sign.



Dominant Vegetation (by stratum):

Wetland Hydrology Indicators:

*A1 – Surface water	*B5 – Iron deposits	*B15 – Marl deposits	*C7 – Thin muck surface
*A2 – High water table	B6 – Surface soil cracks	B16 – Moss trim lines	C8 – Crayfish burrows
*A3 – Saturation	*B7 – Inundated aerial imagery	*C1 – Hydrogen sulfide odor	C9 – Saturation visible on aerial imagery
*B1 – Water marks	*B8 – Sparse veg. concave surface	C2 – Dry-season water table	*D1 – Stunted or stressed plants
*B2 – Sediment deposits	*B9 – Water-stained leaves	*C3 – Oxidized rhizospheres - living root	*D2 – Geomorphic position
*B3 – Drift deposits	B10 – Drainage patterns	*C4 – Presence of reduced iron	*D3 – Shallow aquitard
*B4 – Algal mat or crust	*B13 – Aquatic fauna	*C6 – Recent iron reduction in tilled soils	*D4 – Microtopographic relief
*Denotes Primary Indicator			*D5-FAC-neutral test

Depth (in)	Horizon	Texture	Color	Redox. Features	Other

Hydric Soil Indicator & Reference:
Other Soil Comments:

Maine Power Reliability Project

Team A

WETLAND SUMMARY FORM

Observers: KJW, CCD, DWP Date: 10/23/07
 Town: ALNA Series: 1-7-8-29
 Segment #: 11 CMP Section #: 392 CMP Pole #: 85 Wetland ID #: 1
 Stream/Waterbody ID: A-11-392-85-1-CH1, 2 Corps plot: Yes ☒ No
 Dominant NWI Class: PSS1 Other NWI Classes:

Representative Wetland Vegetation (by Strata):

shrub
Aln inc
Spi alb, Tom
Herb/Graminoid
Gly can Dul aru
Cal can Car sca, str
Sci cyp
Jun eff

Representative Wetland Hydrology

☐ Permanently Flooded (approximate depth -) ☒ Seasonally Flooded (approximate depth -) ☒ Saturated
 Hydrologic Indicators: ☒ Silt Deposition ☒ Water-Stained Leaves
☒ Water Marks ☒ Drift Lines ☒ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots
 Other Observations:

Representative Wetland Soils:
☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-2	Oa	7.5YR3/2	-	Mucky
2-8	Cg1	2.5Y3/2	CFP 10YR4/3	Mucky Sil
8-14	Eg2	5Y3/1	-	Mucky Sil

Other Observations:
 Meets NEIWPCC (2004) Criteria I Frequently ponded/Flooded

Stream # 1 Data:
 Width (Bank-Bank): 8-25' Depth @ Center: 5' Peren. ☒ Intermittent ☐
 Bank Configuration: ☒ Undercut ☒ Vertical ☒ Gradual
 Channel Substrate: ☒ Peat-Muck ☐ Silt-Mud ☐ Sand ☒ Gravel/Cobble ☐ Boulder
see photos P7, P8, P9 ☐ Bedrock During high water
 Stream # 2 Data:
 Width (Bank-Bank): 10' Depth @ Center: 3' Peren. ☒ Intermittent ☐
 Bank Configuration: ☐ Undercut ☒ Vertical ☒ Gradual
 Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☒ Sand ☒ Gravel/Cobble ☐ Boulder
☐ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/ledges, browse, dens, egg masses, potential VP):

Beaver sign - nibbled alders; Coyote scat;
ABA (see Photo 5)

Notes: CH1 width varies; 25' to 8' TRout Brook

☐ Cedar Swamp

☒ Wetland of Special Significance

Photo # _____

SKETCH ON BACK

WETLAND SKETCH

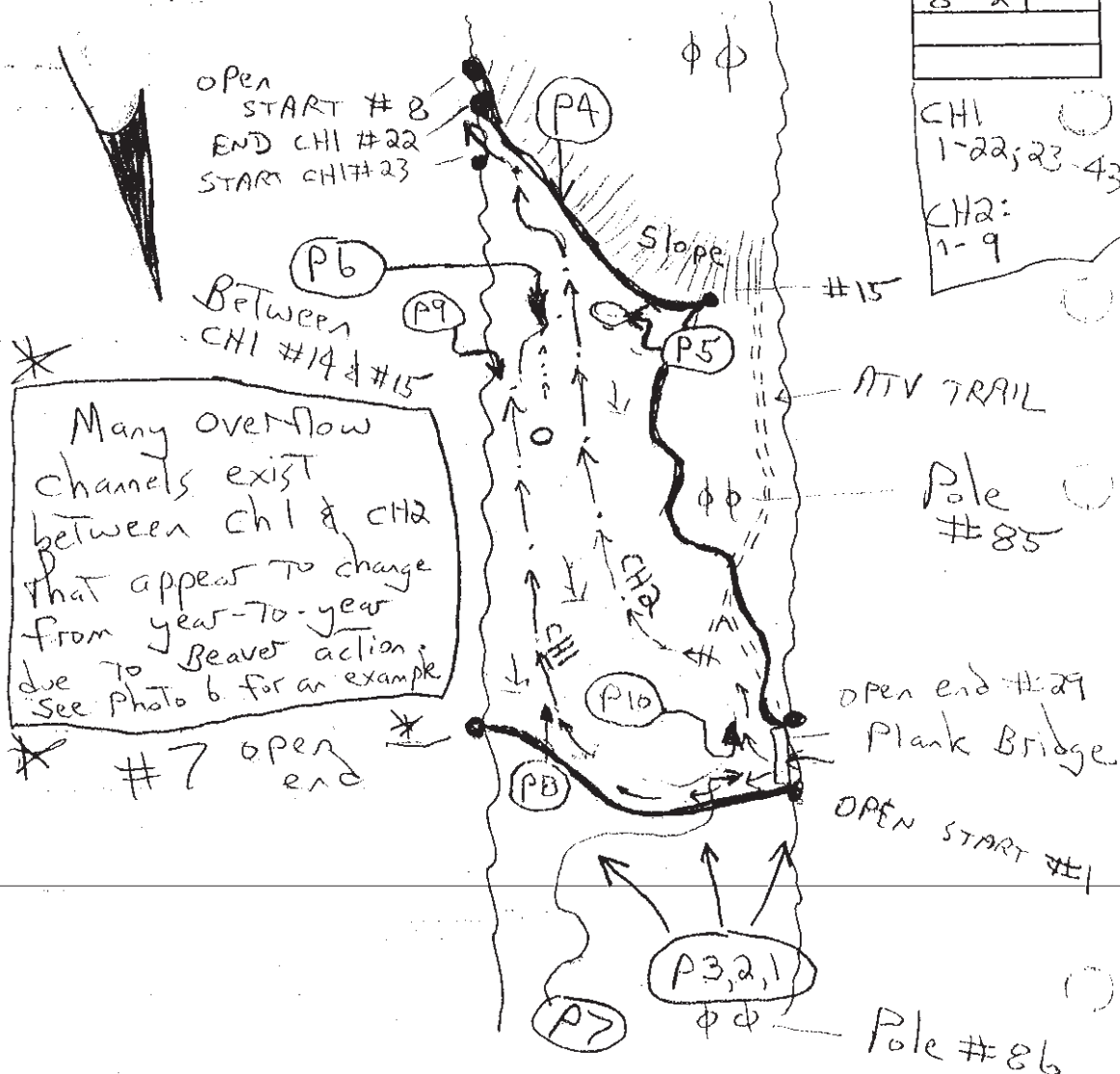
Dwp

Pole # 84

Line Flagging Series
1-7
8-29

CHI
1-22; 23-43

CH2:
1-9



Possible Functions and Values:

- ☐ Groundwater Recharge/Discharge
- ☒ Fish and Shellfish Habitat
- ☐ Nutrient Removal
- ☒ Sediment/Shoreline Stabilization
- ☒ Recreation ATV USAGE etc
- ☐ Uniqueness/Heritage
- ☐ Endangered Species Habitat

- ☒ Floodflow Alteration
- ☒ Sediment/Toxicant Retention
- ☒ Production Export
- ☒ Wildlife Habitat
- ☐ Educational/Scientific Value
- ☐ Visual Quality/Aesthetics
- ☐ Other

Checklist:

- ☒ Wetland ID# A-11-392-85-1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features -- roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☐ Location of important wildlife sign.

A-29-392-1-1

Maine Power Reliability Project

Team F/A

WETLAND SUMMARY FORM

Observers: JLM, DAB

Date: 10/23/08

Town: Wiscasset

Series: X1-X12

Segment #: 29

CMP Section #: 392

CMP Pole #: 1

Wetland ID #: 1

Stream/Waterbody ID: N/A

Corps plot: Yes ☒ No ☒

Dominant NWI Class: PEM1

859. Other NWI Classes: PSS1

Representative Wetland Vegetation (by Strata):

Typ. lat (H) Sci. atr (H)
 Spi. lat (Sh, H) Sci. cyp (H)
 Jun. eff (H) Car. seo (H)
 Omo. sen (H)

Representative Wetland Hydrology

☐ Permanently Flooded
 (approximate depth -)

☒ Seasonally Flooded
 (approximate depth - 6" full)

☐ Saturated
Hydrologic Indicators: ☐ Silt Deposition

Water-Stained Leaves

☒ Water Marks☐ Drift Lines

Surface Scouring

☒ Drainage Patterns☐ Buttressed Trees☐ Elevated Roots

Other Observations:

Impounded by road

Representative Wetland Soils:

☒ Mineral☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-4"	Bg	2.5Y 3/2	7.5YR 3/2	So Lo
4-16"	Cg	10Y 3/1	10YR 4/4	Solo w/G
16"	refusal			

Disturbed Soil

Other Observations:

Meets NEIWPCC (2004) Criteria

Gravel in Cg from ditch
top soil gone

Swanton

Stream # 1 Data:

Ditch, not stream

Width (Bank-Bank): _____

Depth @ Center: _____

Peren. _____

Intermittent _____

Bank Configuration: ☐ Undercut☐ Vertical☐ GradualChannel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder☐ Bedrock

Stream # 2 Data

Width (Bank-Bank): _____

Depth @ Center: _____

Peren. _____

Intermittent _____

Bank Configuration: ☐ Undercut☐ Vertical☐ GradualChannel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder☐ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

deer tracks

Notes:

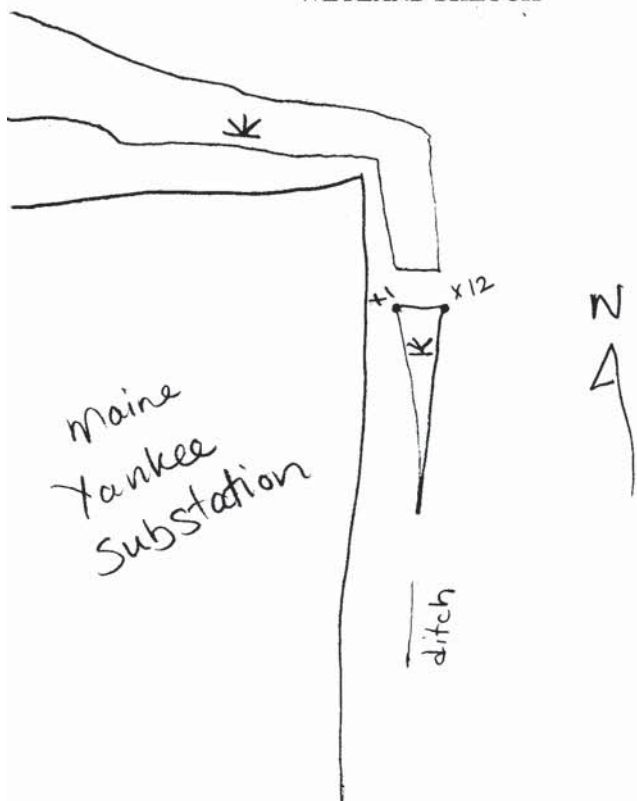
free water @ 2"
saturated to surface☐ Cedar Swamp

Wetland of Special Significance

Photo #

SKETCH ON BACK

WETLAND SKETCH



Line Flagging Series

X1-X12

Possible Functions and Values:

- | | |
|---|---|
| <input type="checkbox"/> Groundwater Recharge/Discharge | <input type="checkbox"/> Floodflow Alteration |
| <input type="checkbox"/> Fish and Shellfish Habitat | <input type="checkbox"/> Sediment/Toxicant Retention |
| <input type="checkbox"/> Nutrient Removal | <input type="checkbox"/> Production Export |
| <input type="checkbox"/> Sediment/Shoreline Stabilization | <input checked="" type="checkbox"/> Wildlife Habitat |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Educational/Scientific Value |
| <input type="checkbox"/> Uniqueness/Heritage | <input type="checkbox"/> Visual Quality/Aesthetics |
| <input type="checkbox"/> Endangered Species Habitat | <input type="checkbox"/> Other |

Checklist:

- ☐ Wetland ID# F-29-392-1-1
- ☐ North arrow.
- ☐ Detailed sketch of wetland boundary and flagging sequence.
- ☐ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☐ Photo locations.
- ☐ Location of important wildlife sign.

WOSS
Data Form Examples
Merrill Road Converter Station

Maine Power Reliability Project

Team B

WETLAND SUMMARY FORM

Observers: KF, MC Date: 9/25/07
 Town: Lowiston Series: _____
 Segment #: 14 CMP Section #: 200 CMP Pole #: 299 Wetland #: 1
 Stream/Waterbody ID: _____ Corps plot: ☒ Yes ☐ No

Dominant NWI Class: PEM1 Other NWI Classes: PSS1

Representative Wetland Vegetation (by Strata)

Calcan Sci cyp
Thy lat owd sen
AST umb
Sol qig

Aln rug
Vib dent
Spic lat

Representative Wetland Hydrology

☐ Permanently Flooded (approximate depth -) ☒ Seasonally Flooded (approximate depth - 4") ☐ Saturated

Hydrologic Indicators: ☐ Silt Deposition ☐ Water-Stained Leaves
☒ Water Marks ☐ Drift Lines ☒ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots

Other Observations:

Representative Wetland Soils:

☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
<u>2-0</u>	<u>0</u>	<u>10YR2/2</u>		<u>F. br c</u>
<u>0-6</u>	<u>1</u>	<u>5Y 4/1</u>		<u>S. lo</u>
<u>6-10</u>	<u>2</u>	<u>5Y 4/1</u>	<u>10YR4/6</u>	
			<u>5Y 6/1</u>	

Other Observations:
 Meets NEIWPCC (2004) Criteria VI

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren: _____ Intermittent: _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
 _____ Bedrock

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren: _____ Intermittent: _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
 _____ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/ledges, browse, dens, egg masses, potential VP):

Notes:

☐ Cedar Swamp

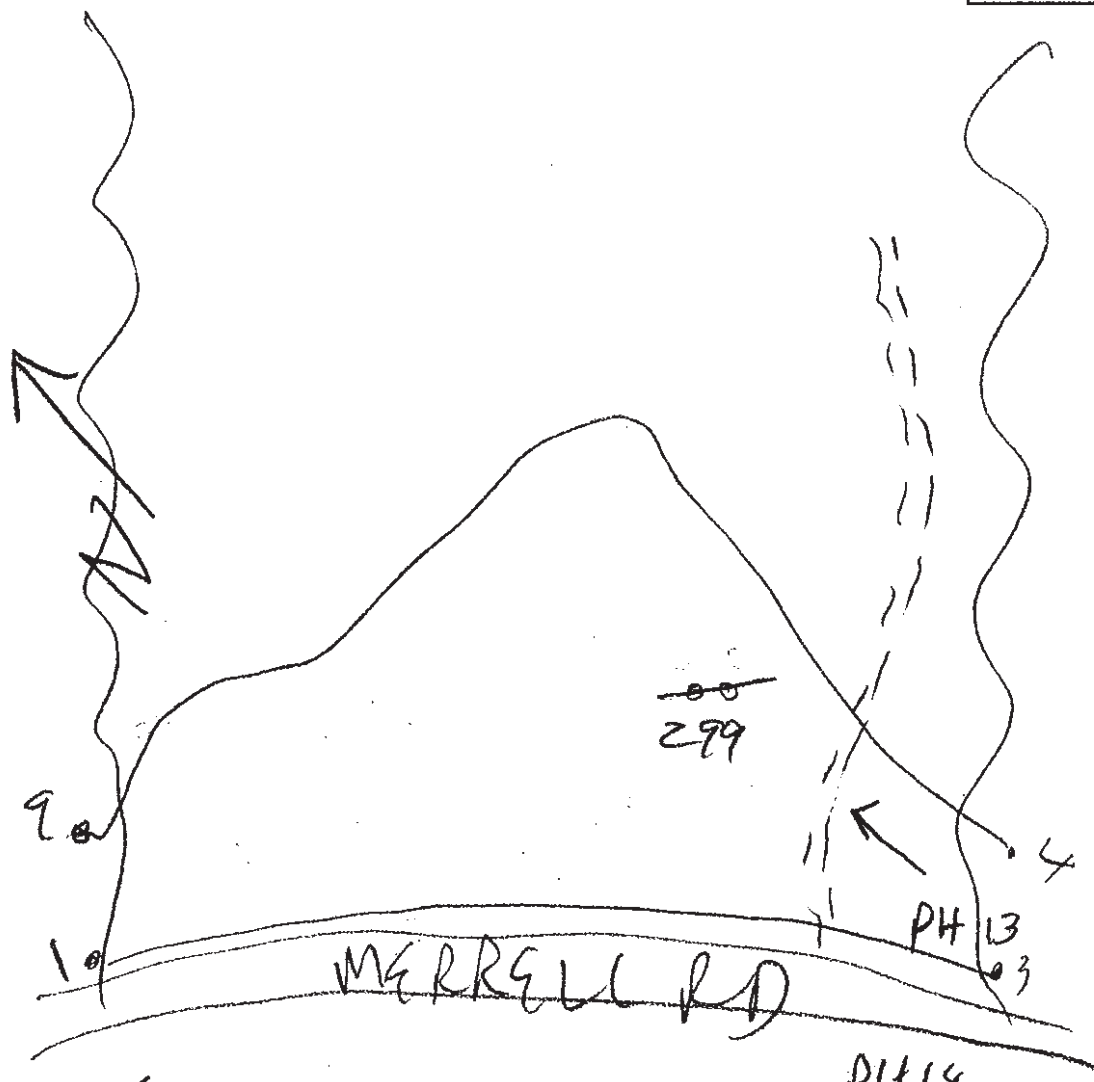
☐ Wetland of Special Significance

Photo # 13/14

SKETCH ON BACK

WETLAND SKETCH

Line Flagging Series
1-3
4-9



Possible Functions and Values:

- ☒ Groundwater Recharge/Discharge
- ☐ Fish and Shellfish Habitat
- ☐ Nutrient Removal
- ☐ Sediment/Shoreline Stabilization
- ☐ Recreation
- ☐ Uniqueness/Heritage
- ☐ Endangered Species Habitat

- ☐ Floodflow Alteration
- ☐ Sediment/Toxicant Retention
- ☐ Production Export
- ☐ Wildlife Habitat
- ☐ Educational/Scientific Value
- ☐ Visual Quality/Aesthetics
- ☐ Other

Checklist:

- ☒ Wetland ID# B14-200-299-1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☐ Location of important wildlife sign.

Date: 4/30/17	Project Name: QMT
Job #: 532	Cowardin Class(es) & %: PFO 1/4 E
Observers: J. Boyle, C. Flink	Photo(s) #: 2
Comments: linear ∇ containing 2 VPs. (significant)	

Dominant Vegetation (by stratum):

Herbs	Herbs (cont.)	Shrubs/Saplings	Trees	Vines
Osm cin	Abr bal	Abi bal	Ace rub	
Ono sen	Sphagnum	Acer rub	Thu occ	
Car cri		Bet pen	Fra nig	
Car str			Bet pen	
			Abi bal	

Wetland Hydrology Indicators:

☐ Perm. Flooded ☒ Seasonally Flooded/Saturated ☐ Saturated
 (approx. depth:) (approx. depth: 10")

*A1 - Surface water	*B5 - Iron deposits	*B15 - Marl deposits	*C7 - Thin muck surface
*A2 - High water table	B6 - Surface soil cracks	B16 - Moss trim lines	C8 - Crayfish burrows
*A3 - Saturation	*B7 - Inundated aerial imagery	*C1 - Hydrogen sulfide odor	C9 - Saturation visible on aerial imagery
*B1 - Water marks	*B8 - Sparse veg. concave surface	C2 - Dry-season water table	*D1 - Stunted or stressed plants
*B2 - Sediment deposits	*B9 - Water-stained leaves	*C3 - Oxidized rhizospheres - living root	*D2 - Geomorphic position
*B3 - Drift deposits	B10 - Drainage patterns	*C4 - Presence of reduced iron	*D3 - Shallow aquitard
*B4 - Algal mat or crust	*B13 - Aquatic fauna	*C6 - Recent iron reduction in tilled soils	*D4 - Microtopographic relief
*Denotes Primary Indicator			*D5-FAC-neutral test

Representative Hydric Soils:

Depth (in)	Horizon	Texture	Color	Redox. Features	Other
0-20+	O	Sapric	Blk	-	very deep in center of wetland.
					field auger length +.

Hydric Soil Indicator & Reference: A1. Histosol.

Other Soil Comments:

WOSS
Data Form Example
Fickett Road Substation

Maine Power Reliability Project WETLAND SUMMARY FORM

Team FE

Observers: MW, SE Date: 10/19/07
 Town: Powassan Series: 1-19, 51(1-14)
 Segment #: 16 CMP Section #: 375 CMP Pole #: 240 Wetland #: 1
 Stream/Waterbody ID: F16-375-240-1-1 Corps plot: Yes ☒ No
 Dominant NWI Class: PSS/PEM Other NWI Classes:

Representative Wetland Vegetation (by Strata):

winter berry	dark green bulrush	elmer's albus
arrow wood	wool grass	blue flag
alnus	typha lat	sol-dage rugosa
meadow sweet	Carex crinita	
3-way sedge	Carex lurida	

Representative Wetland Hydrology

☐ Permanently Flooded (approximate depth -) ☐ Seasonally Flooded (approximate depth -) ☒ Saturated

Hydrologic Indicators: ☐ Silt Deposition ☐ Water-Stained Leaves
☒ Water Marks ☐ Drift Lines ☐ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots

Other Observations:

Representative Wetland Soils:

☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-3	O	-	-	ORGANICS
3-18	Bg	5/586	10% 10/24/6	SiLo

Other Observations:

Meets NEIWPCC (2004) Criteria VI

Stream # 1 Data:

Width (Bank-Bank): 5' Depth @ Center: 1.5' Peren. ☒ Intermittent ☐
 Bank Configuration: ☐ Undercut ☐ Vertical ☒ Gradual
 Channel Substrate: ☐ Peat-Muck ☒ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Stream # 2 Data

Width (Bank-Bank): ☐ Depth @ Center: ☐ Peren. ☐ Intermittent ☐
 Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
 Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

DEER BEDS & TRACKS

Notes:

Peren. Stream Buffered by PSS/PEM WETLANDS

☐ Cedar Swamp

☒ Wetland of Special Significance

Photo #

3 PHOTOS, 2 OF WTL
1. C. STREAM

SKETCH ON BACK

[illegible]

424

Zaw-212

<input checked="" type="checkbox"/> Groundwater Recharge/Discharge	<input checked="" type="checkbox"/> Floodflow Alteration
<input checked="" type="checkbox"/> Fish and Shellfish Habitat	<input checked="" type="checkbox"/> Sediment/Toxicant Retention
<input type="checkbox"/> Nutrient Removal	<input checked="" type="checkbox"/> Production Export
<input type="checkbox"/> Sediment/Shoreline Stabilization	<input checked="" type="checkbox"/> Wildlife Habitat
<input type="checkbox"/> Recreation	<input type="checkbox"/> Educational/Scientific Value
<input type="checkbox"/> Uniqueness/Heritage	<input type="checkbox"/> Visual Quality/Aesthetics
<input type="checkbox"/> Endangered Species Habitat	<input type="checkbox"/> Other

☒ Wetland ID# F-16-375-240-1
☒ North arrow.
☒ Detailed sketch of wetland boundary and flagging sequence.
☒ Natural and man-made features – roads, culverts, outcrops, structures, etc.
☒ Photo locations.
☒ Location of important wildlife sign.

Maine Power Reliability Project WETLAND SUMMARY FORM

Team F

Observers: MW, SE Date: 10/9/07
Town: Panama Series: 1-25
Segment #: 16 CMP Section #: 375 CMP Pole #: 240 Wetland #: 3
Stream/Waterbody ID: _____ Corps plot: Yes ☒ No

Dominant NWI Class: PSS1

Other NWI Classes: _____

Representative Wetland Vegetation (by Strata):

Red maple
Black willow
Arrow wood
Spirea
Airns

typha lat
Juncus eff.
Juncus can.
blue flag

sil. rug.
Scn. fern
Carex lur.
Carex crin.

wool grass

Representative Wetland Hydrology

☐ Permanently Flooded (approximate depth -) ☐ Seasonally Flooded (approximate depth -) ☒ Saturated

Hydrologic Indicators: ☐ Silt Deposition ☒ Water-Stained Leaves
☐ Water Marks ☐ Drift Lines ☐ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots

Other Observations: _____

Representative Wetland Soils:

☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
<u>0-4</u>	<u>O</u>	<u>-</u>	<u>-</u>	<u>ORG</u>
<u>4-17</u>	<u>Bg</u>	<u>5/5B1</u>	<u>79010YR 4/6</u>	<u>SIL</u>

Other Observations: _____
Meets NEIWPCC (2004) Criteria VI

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
Bedrock

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

DEER TRACKS

Notes:

N/A

☐ Cedar Swamp

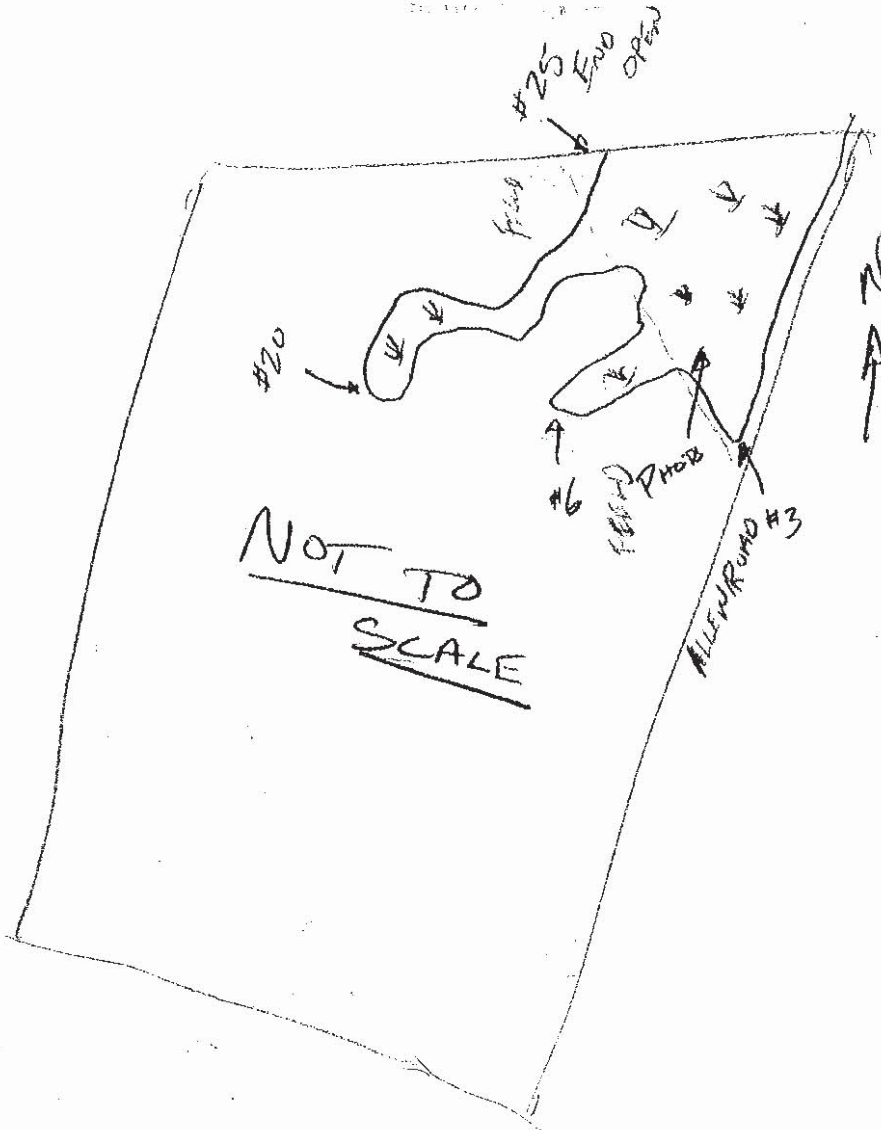
☐ Wetland of Special Significance

Photo #

SKETCH ON BACK

WETLAND SKETCH

Line Flagging Series
1-25



Possible Functions and Values:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Groundwater Recharge/Discharge | <input type="checkbox"/> Floodflow Alteration |
| <input type="checkbox"/> Fish and Shellfish Habitat | <input type="checkbox"/> Sediment/Toxicant Retention |
| <input type="checkbox"/> Nutrient Removal | <input checked="" type="checkbox"/> Production Export |
| <input type="checkbox"/> Sediment/Shoreline Stabilization | <input checked="" type="checkbox"/> Wildlife Habitat |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Educational/Scientific Value |
| <input type="checkbox"/> Uniqueness/Heritage | <input type="checkbox"/> Visual Quality/Aesthetics |
| <input type="checkbox"/> Endangered Species Habitat | <input type="checkbox"/> Other |

Checklist:

- ☒ Wetland ID# F-16-395-240-3
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features – roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☒ Location of important wildlife sign.

Exhibit D: USACE Data Plot Examples

USACE
Data Plot Examples
Segment 1

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: QMI City/County: _____ Sampling Date: 4/13/17
 Applicant/Owner: CMP State: ME Sampling Point: P101-4-5-11P
 Investigator(s): SNIT 175W Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): V. 110y Local relief (concave, convex, none): none
 Slope (%): 3% Lat: 4258 75.78 N Long: 3072163.01 E Datum: NAD83
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.) <u>in cleared ROW</u>	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

SOIL

Sampling Point: Plot-4-5-UP

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ☐ Dark Surface (S7) (**LRR K, L**)
- ☐ Polyvalue Below Surface (S8) (**LRR K, L**)
- ☐ Thin Dark Surface (S9) (**LRR K, L**)
- ☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: QMI City/County: _____ Sampling Date: 4/13/17
 Applicant/Owner: CMP State: ME Sampling Point: Plot 4-5 - WET
 Investigator(s): SNH HSW Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): valley Local relief (concave, convex, none): concave
 Slope (%): 1% Lat: 425055.06 FT N Long: 30722777E Datum: NAD83
 Soil Map Unit Name: _____ NWI classification: PSSIE

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation ☒, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) <u>in cleared ROW</u>	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input checked="" type="checkbox"/> Microtopographic Relief (D4)
		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes _____ No _____ Depth (inches): _____		
Water Table Present? Yes _____ No _____ Depth (inches): _____		
Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): _____		
(includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

Sampling Point: Plot - 4-5 - WET

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>—</u>				
2. <u>—</u>				
3. <u>—</u>				
4. <u>—</u>				
5. <u>—</u>				
6. <u>—</u>				
7. <u>—</u>				
		_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)				
1. <u>Rosa multiflora</u>	<u>7</u>			
2. <u>Alnus incana</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FacW</u>	
3. <u>Lonicera ligustrina</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FacW</u>	
4. <u>—</u>				
5. <u>Potentilla rosea</u>	<u>3</u>			
6. <u>—</u>				
7. <u>—</u>				
		<u>60</u> = Total Cover		
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Onoclea sensibilis</u>	<u>15</u>			
2. <u>Carex lupulina</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>Obl</u>	
3. <u>Solidago rugosa</u>	<u>45</u>	<input checked="" type="checkbox"/>	<u>Fac</u>	
4. <u>Docklingeria umbellata</u>	<u>10</u>			
5. <u>Agrostis gigantea</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FacW</u>	
6. <u>—</u>				
7. <u>—</u>				
8. <u>—</u>				
9. <u>—</u>				
10. <u>—</u>				
11. <u>—</u>				
12. <u>—</u>				
		<u>120</u> = Total Cover		
Woody Vine Stratum (Plot size: _____)				
1. <u>—</u>				
2. <u>—</u>				
3. <u>—</u>				
4. <u>—</u>				
		_____ = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by: _____

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

☒ Rapid Test for Hydrophytic Vegetation

_____ Dominance Test is >50%

_____ Prevalence Index is ≤3.0¹

_____ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

_____ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: Plot 4-5 - wet

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Moxie Gore - Dirigo Partners City/County: Moxie Gore Sampling Date: 7-9-14
 Applicant/Owner: CMP CO State: ME Sampling Point: UP-1
 Investigator(s): ASW Section, Township, Range: Moxie Gore
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): _____ Slope (%): 3
 Subregion (LRR or MLRA): LRR Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

VEGETATION – Use scientific names of plants.

Sampling Point: _____

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Red maple</u>	<u>10</u>		
2. <u>Sugar maple</u>	<u>10</u>		
3. <u>Balsam fir</u>	<u>40</u>		
4. <u>White birch</u>	<u>10</u>		
5. _____			
6. _____			
7. _____			
_____ = Total Cover			

Sapling/Shrub Stratum (Plot size: <u>15</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Red Maple</u>	<u>10</u>		
2. <u>Balsam fir</u>	<u>5</u>		
3. <u>Am Hazelnut</u>	<u>1</u>		
4. <u>White birch</u>	<u>10</u>		
5. _____			
6. _____			
7. _____			
_____ = Total Cover			

Herb Stratum (Plot size: <u>5</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Starflower</u>	<u>75</u>		
2. <u>moss spp.</u>	<u>20</u>		
3. <u>club moss</u>	<u>5</u>		
4. <u>Mia can</u>	<u>5</u>		
5. <u>Viola spp</u>	<u>1</u>		
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
12. _____			
_____ = Total Cover			

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
_____ = Total Cover			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by: _____

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is $\leq 3.0^1$ ___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)___ Problematic Hydrophytic Vegetation¹ (Explain)¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**Definitions of Vegetation Strata:****Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.**Woody vines** – All woody vines greater than 3.28 ft in height.**Hydrophytic Vegetation Present?**Yes _____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point:

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, |
| <input type="checkbox"/> Histic Epipedon (A2) | MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No _____

Remarks:

Refusal @ 6"

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Moxie Gore - Dirigo Partners City/County: Moxie Gore Sampling Date: 7-9-14
 Applicant/Owner: CMP CO State: ME Sampling Point: Wet-1
 Investigator(s): ASW JFM SMG Section, Township, Range: M 5
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR or MLRA): LRR Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____ Hydric Soil Present? Yes <u>X</u> No _____ Wetland Hydrology Present? Yes <u>X</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: <u>MGWHSW25</u>
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) <u>X</u> High Water Table (A2) _____ Aquatic Fauna (B13) <u>X</u> Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) <u>X</u> Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) <u>X</u> Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u>X</u> No _____ Depth (inches): <u>1</u> Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> Saturation Present? Yes <u>X</u> No _____ Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Silver Maple</u>	<u>2</u>		
2. <u>Cedar</u>	<u>5</u>		
3. <u>Black Ash</u>	<u>5</u>		
4. <u>Red Spruce</u>	<u>5</u>		
5. <u>Balsam Fir</u>	<u>20</u>		
6. _____	_____		
7. _____	_____		
_____ = Total Cover			

Sapling/Shrub Stratum (Plot size: <u>15ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Balsam fir</u>	<u>75</u>		
2. <u>Red Maple</u>	<u>1</u>		
3. <u>W. ID'd shrub</u>	<u>10</u>		
4. <u>Yellow birch</u>	<u>1</u>		
5. <u>White birch</u>	<u>1</u>		
6. <u>Cedar</u>	<u>1</u>		
7. <u>Red Spruce</u>	<u>1</u>		
_____ = Total Cover			

Herb Stratum (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Spagnum moss</u>	<u>98</u>	<u>Y</u>	
2. <u>Bunchberry</u>	<u>10</u>		
3. <u>Bidens</u>	<u>45</u>	<u>Y</u>	
4. <u>Jewelweed</u>	<u>2</u>		
5. <u>Sarsparilla</u>	<u>5</u>		
6. <u>Bristly dewberry</u>	<u>2</u>		
7. <u>Goldthread</u>	<u>2</u>		
8. <u>Ladyfern</u>	<u>>1</u>		
9. <u>Cleaver</u>	<u>>1</u>		
10. <u>Carex Spp.</u>	<u>15</u>		
11. _____	_____		
12. _____	_____		
_____ = Total Cover			

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____	_____		
2. _____	_____		
3. _____	_____		
4. _____	_____		
_____ = Total Cover			

Remarks: (Include photo numbers here or on a separate sheet.)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)
Prevalence Index = B/A = _____	

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0¹

___ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes X No _____

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input checked="" type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input checked="" type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ~~_____~~ No _____

Remarks:

USACE
Data Plot Examples
Segment 2

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: CMP - MREI City/County: Somerset County Sampling Date: 9/22/2015
 Applicant/Owner: CMP State: ME Sampling Point: UPL-72-10
 Investigator(s): M. Banaitis / K. Maloney Section, Township, Range: Moscow
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): none Slope (%): 2%
 Subregion (LRR or MLRA): LRR R Lat: 45, 6, 18.502 Long: 69, 50, 18.890 Datum: WGS 84
 Soil Map Unit Name Colonel-Dixfield-Pillsbury association, 3 to 15 percent slopes NWI Classification: N/A

Are climatic / hydrologic conditions of the site typical for this time of the year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u> If yes, optional Wetland Site ID: <u> </u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u> </u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u> </u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u> </u> Drainage Patterns (B10)
<u> </u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u> </u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u> </u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes <u> </u> No <u>X</u>
Surface Water Present? Yes <u> </u> No <u> </u>	Depth (inches): <u> </u>	
Water Table Present? Yes <u> </u> No <u> </u>	Depth (inches): <u> </u>	
Saturation Present? Yes <u> </u> No <u> </u>	Depth (inches): <u> </u>	

(includes capillary fringe)

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants
Sampling Point: UPL-72-10

Tree Stratum (Plot Size: _____)				Absolute % Cover		Dominant Species?		Indicator Status	
1.	<i>Populus tremuloides</i>		40		Y		FACU		
2.	<i>Betula papyrifera</i>		20		Y		FACU		
3.	<i>Betula populifolia</i>		20		Y		FAC		
4.	<i>Acer rubrum</i>		10		N		FAC		
5.									
6.									
7.									
8.									
9.									
10.									
			90	=	Total Cover				

Sapling/Shrub Stratum (Plot Size: _____)				Absolute % Cover		Dominant Species?		Indicator Status	
1.	<i>Corylus cornuta</i>		30		Y		FACU		
2.	<i>Betula populifolia</i>		10		Y		FAC		
3.	<i>Populus tremuloides</i>		10		Y		FACU		
4.									
5.									
6.									
7.									
8.									
9.									
10.									
			50	=	Total Cover				

Herb Stratum (Plot Size: _____)				Absolute % Cover		Dominant Species?		Indicator Status	
1.	<i>Eurybia macrophylla</i>		10		Y		UPL		
2.	<i>Aralia nudicaulis</i>		10		Y		FACU		
3.	<i>Rubus idaeus</i>		5		Y		FACU		
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
			25	=	Total Cover				

Woody Vine Stratum (Plot Size: _____)				Absolute % Cover		Dominant Species?		Indicator Status	
1.									
2.									
3.									
4.									
5.									
			0	=	Total Cover				

Remarks: (Include photo numbers here or on a separate sheet.)

Dominance Test worksheet:

Number of Dominant Species that are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 9 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 22.22% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>40</u>	x 3 = <u>120</u>
FACU species <u>115</u>	x 4 = <u>460</u>
UPL species <u>10</u>	x 5 = <u>50</u>
Column Totals: <u>165</u> (A)	<u>630</u> (B)

Prevalence Index = B/A = 3.82

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation

Present? Yes No X

SOIL

Sampling Point: UPL-72-10

[illegible]

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: CMP - MREI City/County: Somerset County Sampling Date: 9/22/2015
 Applicant/Owner: CMP State: ME Sampling Point: WET-72-10
 Investigator(s): M. Banaitis / K. Maloney Section, Township, Range: Moscow
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): Concave Slope (%): 0%
 Subregion (LRR or MLRA): LRR R Lat: 45, 6, 17.802 Long: 69, 50, 19.188 Datum: WGS 84
 Soil Map Unit Name Colonel-Dixfield-Pillsbury association, 3 to 15 percent slopes NWI Classification: PSS

Are climatic / hydrologic conditions of the site typical for this time of the year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u>X</u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u> If yes, optional Wetland Site ID: <u> </u>
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Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<u> </u> Surface Water (A1)	<u>X</u> Water-Stained Leaves (B9)	<u> </u> Surface Soil Cracks (B6)
<u>X</u> High Water Table (A2)	<u> </u> Aquatic Fauna (B13)	<u> </u> Drainage Patterns (B10)
<u>X</u> Saturation (A3)	<u> </u> Marl Deposits (B15)	<u> </u> Moss Trim Lines (B16)
<u> </u> Water Marks (B1)	<u>X</u> Hydrogen Sulfide Odor (C1)	<u> </u> Dry-Season Water Table (C2)
<u> </u> Sediment Deposits (B2)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)	<u> </u> Crayfish Burrows (C8)
<u> </u> Drift Deposits (B3)	<u> </u> Presence of Reduced Iron (C4)	<u> </u> Saturation Visible on Aerial Imagery (C9)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)	<u> </u> Stunted or Stressed Plants (D1)
<u> </u> Iron Deposits (B5)	<u> </u> Thin Muck Surface (C7)	<u> </u> Geomorphic Position (D2)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Other (Explain in Remarks)	<u> </u> Shallow Aquitard (D3)
<u> </u> Sparsely Vegetated Concave Surface (B8)		<u> </u> Microtopographic Relief (D4)
		<u> </u> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>10</u> Saturation Present? Yes <u>X</u> No <u> </u> Depth (inches): <u>6</u> (includes capillary fringe)		Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION - Use scientific names of plants

Sampling Point: WET-72-10

Tree Stratum (Plot Size: _____)				Absolute % Cover	Dominant Species?	Indicator Status
1.	_____					
2.	_____					
3.	_____					
4.	_____					
5.	_____					
6.	_____					
7.	_____					
8.	_____					
9.	_____					
10.	_____					
				0 = Total Cover		
Sapling/Shrub Stratum (Plot Size: _____)				Absolute % Cover	Dominant Species?	Indicator Status
1.	<i>Salix bebbiana</i>	40	Y	FACW		
2.	<i>Fraxinus nigra</i>	15	Y	FACW		
3.	<i>Alnus incana</i>	10	N	FACW		
4.	_____					
5.	_____					
6.	_____					
7.	_____					
8.	_____					
9.	_____					
10.	_____					
				65 = Total Cover		
Herb Stratum (Plot Size: _____)				Absolute % Cover	Dominant Species?	Indicator Status
1.	<i>Osmundastrum cinnamomeum</i>	30	Y	FACW		
2.	<i>Epilobium ciliatum</i>	15	Y	FACW		
3.	<i>Persicaria sagittata</i>	10	N	OBL		
4.	<i>Equisetum fluviatile</i>	10	N	OBL		
5.	<i>Galium asprellum</i>	5	N	OBL		
6.	<i>Dryopteris intermedia</i>	5	N	FAC		
7.	_____					
8.	_____					
9.	_____					
10.	_____					
11.	_____					
12.	_____					
13.	_____					
14.	_____					
15.	_____					
				75 = Total Cover		
Woody Vine Stratum (Plot Size: _____)				Absolute % Cover	Dominant Species?	Indicator Status
1.	_____					
2.	_____					
3.	_____					
4.	_____					
5.	_____					
				0 = Total Cover		

Remarks: (Include photo numbers here or on a separate sheet.)

Dominance Test worksheet:

Number of Dominant Species that are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>25</u>	x 1 = <u>25</u>
FACW species <u>110</u>	x 2 = <u>220</u>
FAC species <u>5</u>	x 3 = <u>15</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>140</u> (A)	<u>260</u> (B)
Prevalence Index = B/A = <u>1.86</u>	

Hydrophytic Vegetation Indicators:

 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0¹

 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines - All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation

Present? Yes X No

SOIL

Sampling Point: WET-72-10

[illegible]

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: QMI City/County: _____ Sampling Date: 5/17/17
 Applicant/Owner: CMP State: LA Sampling Point: Plot - 71-102-UP
 Investigator(s): SNH CJP Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): - Slope (%): 4%
 Subregion (LRR or MLRA): _____ Lat: 829810,654N Long: 3029929 P+ E Datum: NAD 83
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes _____ No _____ Depth (inches): _____		
Water Table Present? Yes _____ No _____ Depth (inches): _____		
Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: <u>No Hydrology indicators present</u>		

VEGETATION – Use scientific names of plants.

 Sampling Point: Plot 71-102-UP

Tree Stratum (Plot size: <u>30' R</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Fagus grandifolia</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FacU</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.5</u> (A/B)																
2. <u>Acer rubrum</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>Fac</u>																	
3. <u>Fraxinus pennsylvanica</u>	<u>7</u>		<u>Fac</u>																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
<u>37</u> = Total Cover				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species <u>52</u></td> <td>x 3 = <u>156</u></td> </tr> <tr> <td>FACU species <u>30</u></td> <td>x 4 = <u>120</u></td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: <u>82</u> (A)</td> <td><u>276</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.36</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species <u>52</u>	x 3 = <u>156</u>	FACU species <u>30</u>	x 4 = <u>120</u>	UPL species _____	x 5 = _____	Column Totals: <u>82</u> (A)	<u>276</u> (B)	Prevalence Index = B/A = <u>3.36</u>	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species _____	x 2 = _____																			
FAC species <u>52</u>	x 3 = <u>156</u>																			
FACU species <u>30</u>	x 4 = <u>120</u>																			
UPL species _____	x 5 = _____																			
Column Totals: <u>82</u> (A)	<u>276</u> (B)																			
Prevalence Index = B/A = <u>3.36</u>																				
<u>30</u> = Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. <u>Abies balsamea</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>Fac</u>																	
2. <u>Acer rubrum</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>Fac</u>																	
3. <u>Ostrya virginiana</u>	<u>5</u>		<u>FacU</u>																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
<u>30</u> = Total Cover																				
Herb Stratum (Plot size: <u>5'</u>)																				
1. <u>Desmodium illinoense</u>	<u>2</u>		<u>FacU</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Streptopus lanceolatus</u>	<u>3</u>	<input checked="" type="checkbox"/>	<u>FacU</u>																	
3. <u>Mentha canadense</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>FacU</u>																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
<u>15</u> = Total Cover																				
Woody Vine Stratum (Plot size: <u>15'</u>)																				
1. _____				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
2. _____																				
3. _____																				
4. _____																				
_____ = Total Cover																				
Hydrophytic Vegetation Present? Yes _____ No <u>X</u>																				
Remarks: (Include photo numbers here or on a separate sheet.)																				

Sampling Point: Plot 71-102-UP

Northcentral and Northeast Region – Version 2.0

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: QMI City/County: _____ Sampling Date: 5/17/18
 Applicant/Owner: CMP State: ME Sampling Point: Plot 71-102-WET
 Investigator(s): SNH CJF Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 2%
 Subregion (LRR or MLRA): _____ Lat: 829669.43 N Long: 3029818.93 W Datum: NAD 83
 Soil Map Unit Name: _____ NWI classification: PFOIE
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) <u>Plot in PFO area near I-STR-102-2</u>	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>1"</u> Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>1"</u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>to surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

Sampling Point: Plot 71-102 - WET

Tree Stratum (Plot size: <u>30'R</u>)				Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Fraxinus pennsylvanica</u>	<u>50</u>	<input checked="" type="checkbox"/>	<u>Fac</u>		
2.	<u>Acer rubrum</u>	<u>5</u>				
3.	<u>Populus tremuloides</u>	<u>10</u>				
4.	<u>Betula alleghaniensis</u>	<u>15</u>				
5.						
6.						
7.						
		<u>80</u>	= Total Cover			

Sapling/Shrub Stratum (Plot size: <u>15'</u>)				Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Abies balsamea</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>Fac</u>		
2.	<u>Acer rub</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>Fac</u>		
3.	<u>Ostrya virginiana</u>	<u>5</u>				
4.						
5.						
6.						
7.						
		<u>30</u>	= Total Cover			

Herb Stratum (Plot size: <u>5'</u>)				Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Cinn latifolia</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FacW</u>		
2.	<u>Impatiens copensis</u>	<u>5</u>				
3.	<u>Solidago gigantea</u>	<u>10</u>				
4.	<u>Oxyclea sensibilis</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>FacW</u>		
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
		<u>65</u>	= Total Cover			

Woody Vine Stratum (Plot size: <u>30'</u>)				Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>—</u>					
2.						
3.						
4.						
			= Total Cover			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 1 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals:	(A) (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

☒ 1 - Rapid Test for Hydrophytic Vegetation

☒ 2 - Dominance Test is >50%

☐ 3 - Prevalence Index is ≤3.0¹

☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: (Include photo numbers here or on a separate sheet.)

Some mianthema canadense on nearby or mound

Sampling Point: Plot - 71-102-WET

Sampling Point: Plot - 71-102-WET

Sampling Point: Plot - 71-102-WET

²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- ### Indicators for Problematic Hydric Soils³:

Indicators for Problematic Hydric Soils³:

Hydric Soil Present? Yes ☒ No ☐Hydric Soil Present? Yes ☒ No ☐Hydric Soil Present? Yes ☒ No ☐Hydric Soil Present? Yes ☒ No ☐

USACE
Data Plot Examples
Segment 3

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: QMI City/County: Concord, Somerset Co. Sampling Date: 5.22.17
 Applicant/Owner: CMP State: ME Sampling Point: Plot-76-02-UP
 Investigator(s): HSW JPB Section, Township, Range: Concord
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): none
 Slope (%): _____ Lat: N 810511.43 Long: E 3022075.93 Datum: CONUS
 Soil Map Unit Name: _____ NWI classification: n/a
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No ☒
 Hydric Soil Present? Yes _____ No ☒
 Wetland Hydrology Present? Yes _____ No ☒

Is the Sampled Area within a Wetland? Yes _____ No ☒
 If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

WOSS due to stream

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)

- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____
 Water Table Present? Yes _____ No _____ Depth (inches): _____
 Saturation Present? Yes _____ No _____ Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

no hydrology

VEGETATION – Use scientific names of plants.

Sampling Point: Plot 76-02-UP

Tree Stratum (Plot size: <u>30'</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<u><i>Tsuga canadense</i></u>	<u>90</u>		<u>FACU</u>
2.	<u><i>Acer pensylvanicum</i></u>	<u>10</u>		<u>FACU</u>
3.				
4.				
5.				
6.				
7.				

50 = Total Cover

Sapling/Shrub Stratum (Plot size: <u>15'</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<u><i>Tsuga canadense</i></u>	<u>10</u>		<u>FACU</u>
2.	<u><i>Acer pensylvanicum</i></u>	<u>10</u>		<u>FACU</u>
3.	<u><i>Fagus grandifolia</i></u>	<u>5</u>		<u>FACU</u>
4.				
5.				
6.				
7.				

25 = Total Cover

Herb Stratum (Plot size: <u>5'</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<u><i>Maianthemum Canadense</i></u>	<u>10</u>		<u>FACU</u>
2.	<u><i>Tsuga canadense</i></u>	<u>5</u>		<u>FACU</u>
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

15 = Total Cover

Woody Vine Stratum (Plot size: _____)		Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				

_____ = Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>7</u>	x 4 = <u>28</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>7</u> (A)	<u>28</u> (B)
Prevalence Index = B/A = <u>4</u>	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0¹
- ☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present?

Yes _____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

Sampling Point: Plt-76-02-4p

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ☐ Dark Surface (S7) (**LRR K, L**)
- ☐ Polyvalue Below Surface (S8) (**LRR K, L**)
- ☐ Thin Dark Surface (S9) (**LRR K, L**)
- ☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

US Army Corps of Engineers

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: QMI City/County: Concord, Somerset Sampling Date: 5.22.17
 Applicant/Owner: CMP State: ME Sampling Point: Plot 7C-02-WET
 Investigator(s): HSW JPB Section, Township, Range: Concord
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none
 Slope (%): _____ Lat: N 810630.22 Long: E 3022118.46 Datum: CONUS
 Soil Map Unit Name: _____ NWI classification: PSSIE

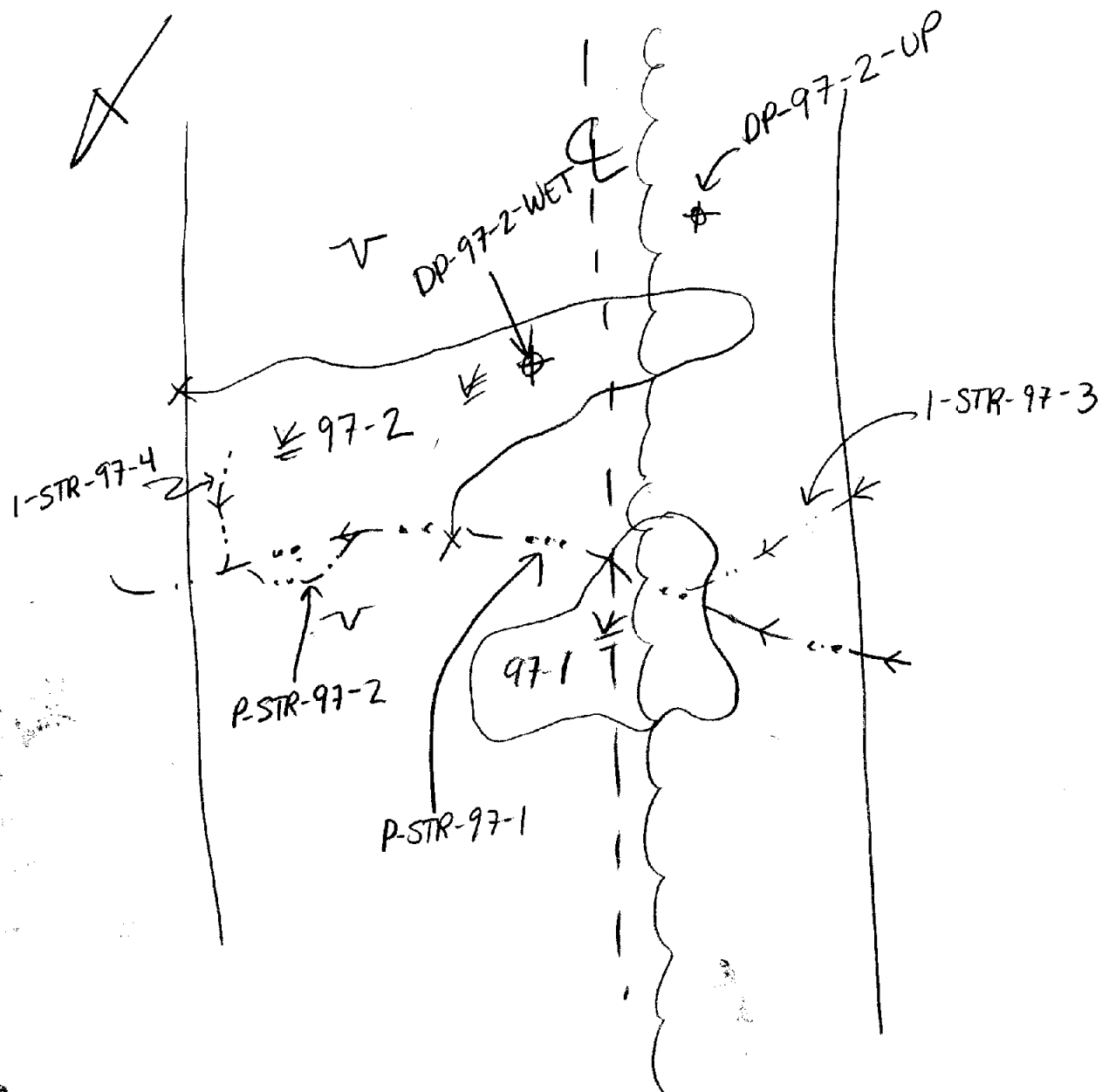
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No _____
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.)	

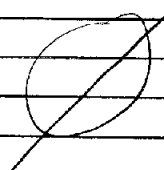
HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____	
Water Table Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>4"</u>	
Saturation Present? Yes <input checked="" type="checkbox"/> No _____	Depth (inches): <u>Surface</u>	
(includes capillary fringe)		Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		



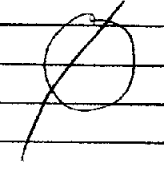
VEGETATION – Use scientific names of plants.

Sampling Point: PL-76-02-WE1

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. 			
2.			
3.			
4.			
5.			
6.			
7.			

Sapling/Shrub Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Alnus incana</u>	<u>60</u>	<u>FACW</u>	
2.			
3.			
4.			
5.			
6.			
7.			

Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rubus pubescence</u>	<u>5</u>	<u>FACW</u>	
2. <u>Osmunda cinnamomeum</u>	<u>2</u>	<u>FACW</u>	
3. <u>Carex sp.</u>	<u>20</u>		
4. <u>Maianthemum canadense</u>	<u>2</u>	<u>FACU</u>	
5. <u>Thalictrum dioicum</u>		<u>FACU</u>	
6. <u>Abies balsamea</u>	<u>>1</u>	<u>FAC</u>	
7. <u>Tiarella cordifolia</u>	<u>10</u>	<u>FACU</u>	
8.			
9.			
10.			
11.			
12.			

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. 			
2.			
3.			
4.			

Remarks: (Include photo numbers here or on a separate sheet.)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>3</u>	x 2 = <u>6</u>
FAC species <u>1</u>	x 3 = <u>3</u>
FACU species <u>3</u>	x 4 = <u>12</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>7</u> (A)	<u>21</u> (B)
Prevalence Index = B/A = <u>3</u>	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☒ 3 - Prevalence Index is ≤3.0¹
- ☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present?

Yes ☒ No ☐

Sampling Point: P/6t-76-02-WET

[illegible]²Location: PL=Pore Lining, M=Matrix

Indicators for Problematic Hydric Soils³

- | | | |
|---|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) | <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Dark Surface (S7) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Sandy Redox (S5) | | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> Stripped Matrix (S6) | | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | | <input type="checkbox"/> Other (Explain in Remarks) |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No

Northcentral and Northeast Region – Version 2.0

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: QMI City/County: Franklin Sampling Date: 5.17.17
 Applicant/Owner: CMP State: ME Sampling Point: Plot 99-06-up
 Investigator(s): HSW DHP Section, Township, Range: Starus
 Landform (hillslope, terrace, etc.): pit and mound Local relief (concave, convex, none): concave Slope (%): 1%
 Subregion (LRR or MLRA): (M) Lat: 701351.60 Long: 3002361.85 Datum: NAD 83/CONUS
 Soil Map Unit Name: _____ NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation N/A, Soil N/A, or Hydrology N/A significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
 Are Vegetation N/A, Soil N/A, or Hydrology N/A naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.)	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes _____ No <u>N/A</u>	Depth (inches): _____	Wetland Hydrology Present? Yes _____ No <u>X</u>
Water Table Present? Yes <u>N/A</u> No _____	Depth (inches): _____	
Saturation Present? Yes _____ No _____	Depth (inches): _____	
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' R</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Betula papyrifera</u>	<u>10%</u>		<u>FACU</u>
2. <u>Abies balsamea</u>	<u>2%</u>		<u>FAC</u>
3. <u>Populus tremuloides</u>	<u>20%</u>		<u>FACU</u>
4. <u>Acer spicatum</u>	<u>10%</u>		<u>FACU</u>
5. <u>Acer rubrum</u>	<u>15%</u>		<u>FAC</u>
6. <u>Thuja canadensis</u>	<u>10%</u>		<u>FACU</u>
7. _____			

67% = Total Cover

Sapling/Shrub Stratum (Plot size: <u>15' R</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Abies balsamea</u>	<u>10%</u>		<u>FAC</u>
2. <u>Acer spicatum</u>	<u>15%</u>		<u>FACU</u>
3. <u>Fagus grandifolia</u>	<u>1%</u>		<u>FACU</u>
4. _____			
5. _____			
6. _____			
7. _____			

26% = Total Cover

Herb Stratum (Plot size: <u>5' R</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Mniamanthum canadense</u>	<u>3%</u>		<u>FACU</u>
2. <u>Erythronium rostratum</u>	<u>21%</u>		
3. <u>Trentalis borealis</u>	<u>2%</u>		<u>FAC</u>
4. <u>Aralia nudicaulis</u>	<u><1%</u>		<u>FACU</u>
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
12. _____			

6% = Total Cover

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			

= Total Cover

Remarks: (Include photo numbers here or on a separate sheet.)

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>4</u>	x 3 = <u>12</u>
FACU species <u>8</u>	x 4 = <u>32</u>
UPL species <u>0</u>	x 5 = <u>0</u>
Column Totals: <u>12</u> (A)	<u>44</u> (B)
Prevalence Index = B/A = <u>44/12 = 3.66</u>	

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
☐ 2 - Dominance Test is >50%
☐ 3 - Prevalence Index is ≤3.0¹
☐ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.**Woody vines** – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present?

Yes _____ No X

Sampling Point: Plot-99-06-4p

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- ³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Type: rock
Depth (inches): 13"

Hydric Soil Present? Yes _____ No ☒

Northcentral and Northeast Region – Version 2.0

need to transfer notes (on V plot)

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: QMI City/County: Franklin Sampling Date: 5.17.17
 Applicant/Owner: CMP State: ME Sampling Point: Plot-99-06-WET
 Investigator(s): HSW DHP Section, Township, Range: Starks
 Landform (hillslope, terrace, etc.): flat basin Local relief (concave, convex, none): concave Slope (%): 1%
 Subregion (LRR or MLRA): MLRA Lat: 701394.08' Long: 3002431.98' Datum:
 Soil Map Unit Name: NWI classification: PFO 1/4 E
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	If yes, optional Wetland Site ID: <u></u>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Remarks: (Explain alternative procedures here or in a separate report.)

morphological adaptations observed among over 50% of tsuga + populus trees.

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Microtopographic Relief (D4)
<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Aquatic Fauna (B13)	
<input type="checkbox"/> Marl Deposits (B15)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations:

Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>4"</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>surface</u>	
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u></u>	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

N/A

Remarks:

Pit + Mound micro-topo w/ water in pits
free water in pit 1" below soil surface.

VEGETATION – Use scientific names of plants.

 Sampling Point: Plot-99-06-WE7

Tree Stratum (Plot size: <u>30' R</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:														
1. <u>Populus tremuloides</u>	<u>20%</u>		<u>FAC*</u>	Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)														
2. <u>Abies balsamea</u>	<u>2%</u>		<u>FAC</u>															
3. <u>Tsuga canadensis</u>	<u>2%</u>		<u>FAC*</u>															
4. <u>Acer rubrum</u>	<u>3%</u>		<u>FAC</u>															
5. <u>Betula populifolia</u>	<u><1%</u>		<u>FAC</u>															
6. _____	_____	_____	_____	Prevalence Index worksheet: <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>2</u></td> <td>x 2 = <u>4</u></td> </tr> <tr> <td>FAC species <u>11</u></td> <td>x 3 = <u>33</u></td> </tr> <tr> <td>FACU species <u>2</u></td> <td>x 4 = <u>8</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>15</u></td> <td>(A) <u>45</u> (B)</td> </tr> </table> Prevalence Index = B/A = <u>45/15 = 3</u>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>2</u>	x 2 = <u>4</u>	FAC species <u>11</u>	x 3 = <u>33</u>	FACU species <u>2</u>	x 4 = <u>8</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>15</u>	(A) <u>45</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>0</u>	x 1 = <u>0</u>																	
FACW species <u>2</u>	x 2 = <u>4</u>																	
FAC species <u>11</u>	x 3 = <u>33</u>																	
FACU species <u>2</u>	x 4 = <u>8</u>																	
UPL species <u>0</u>	x 5 = <u>0</u>																	
Column Totals: <u>15</u>	(A) <u>45</u> (B)																	
Sapling/Shrub Stratum (Plot size: <u>15' R</u>)																		
1. <u>Acer rubrum</u>	<u>5%</u>		<u>FAC</u>															
2. <u>Viburnum dentatum</u>	<u><1%</u>		<u>FAC</u>															
3. <u>Spirea latifolia</u>	<u><1%</u>		<u>FACW</u>															
4. _____	_____	_____	_____															
5. _____	_____	_____	_____															
6. _____	_____	_____	_____															
7. _____	_____	_____	_____															
Herb Stratum (Plot size: <u>5' radius</u>)																		
1. <u>Miananthem canadense</u>	<u>15%</u>		<u>FACU</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
2. <u>Cornus canadensis</u>	<u>8%</u>		<u>FAC</u>															
3. <u>Dryopteris carthusiana</u>	<u>1%</u>		<u>FACW</u>															
4. <u>Abies balsamea</u>	<u><1%</u>		<u>FAC</u>															
5. <u>Acer rubrum</u>	<u>1%</u>		<u>FAC</u>															
6. <u>Pinus strobus</u>	<u><1%</u>		<u>FACU</u>															
7. <u>Betula alleghaniensis</u>	<u><1%</u>		<u>FAC</u>															
8. <u>Sphagnum</u>	_____	_____	_____															
9. _____	_____	_____	_____															
10. _____	_____	_____	_____															
11. _____	_____	_____	_____															
12. _____	_____	_____	_____															
Woody Vine Stratum (Plot size: _____)																		
1. _____	_____	_____	_____	Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.														
2. _____	_____	_____	_____															
3. _____	_____	_____	_____															
4. _____	_____	_____	_____															
_____ = Total Cover				Hydrophytic Vegetation Present? Yes <u>X</u> No _____														

Remarks: (Include photo numbers here or on a separate sheet.)

*pop trem ÷ tsu can have morphological adaptations status Δ'd to FAC.

Sampling Point: P/04-99-06-WET

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) (LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

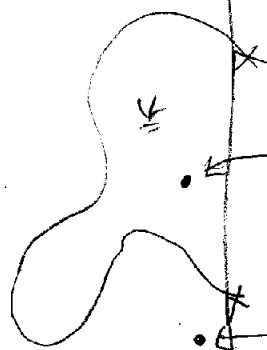
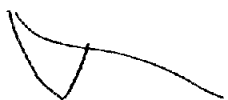
- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Type: rock @ 11"
Depth (inches): 11"

Hydric Soil Present? Yes ☒ No ☐

Remarks:



✓

✓

✓ DP-74-6

✓ DP-74-6

USACE
Data Plot Examples
Segment 4

WETLAND SUMMARY FORM

Observers: MP, AG, MC Date: 10-18-07
 Town: Lewiston Series: WGR
 Segment #: 17 CMP Section #: 64 CMP Pole #: 60 Wetland ID #: 1
 Stream/Waterbody ID: C#1 Corps plot: ☒ Yes ☐ No

Dominant NWI Class: PSS1Other NWI Classes: PP01/4

Representative Wetland Vegetation (by Strata):

Shrub
Ilex
Vib. c.
Spiraea
Aln. rug.
asm. cin.
amb. fen.
asm. reg.
Thel. pal.

Acern
A. hybrid
R. sp.

Representative Wetland Hydrology

☐ Permanently Flooded
 (approximate depth -)

☐ Seasonally Flooded
 (approximate depth -)

☒ Saturated

Hydrologic Indicators: ☐ Silt Deposition ☐ Water-Stained Leaves
☐ Water Marks ☐ Drift Lines ☒ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots

Other Observations:

Representative Wetland Soils:

☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
0-8	A	10YR 6/6	—	Sand
8-16	Da	10YR 2/1	—	Sap

Other Observations:

Meets NEIWPCC (2004) Criteria UNK prob. soil Alluvial?

Stream # 1 Data:

Width (Bank-Bank): 3-4' Depth @ Center: 6-12" Peren. ☒ Intermittent ☐
 Bank Configuration: ☐ Undercut ☐ Vertical ☒ Gradual
 Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☒ Gravel/Cobble ☐ Boulder
☐ Bedrock

Stream # 2 Data

Width (Bank-Bank): Depth @ Center: Peren. ☐ Intermittent ☐
 Bank Configuration: ☐ Undercut ☐ Vertical ☐ Gradual
 Channel Substrate: ☐ Peat-Muck ☐ Silt-Mud ☐ Sand ☐ Gravel/Cobble ☐ Boulder
☐ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

MOUSE -
Beaver

Notes:

Streamside

☐ Cedar Swamp☒ Wetland of Special Significance

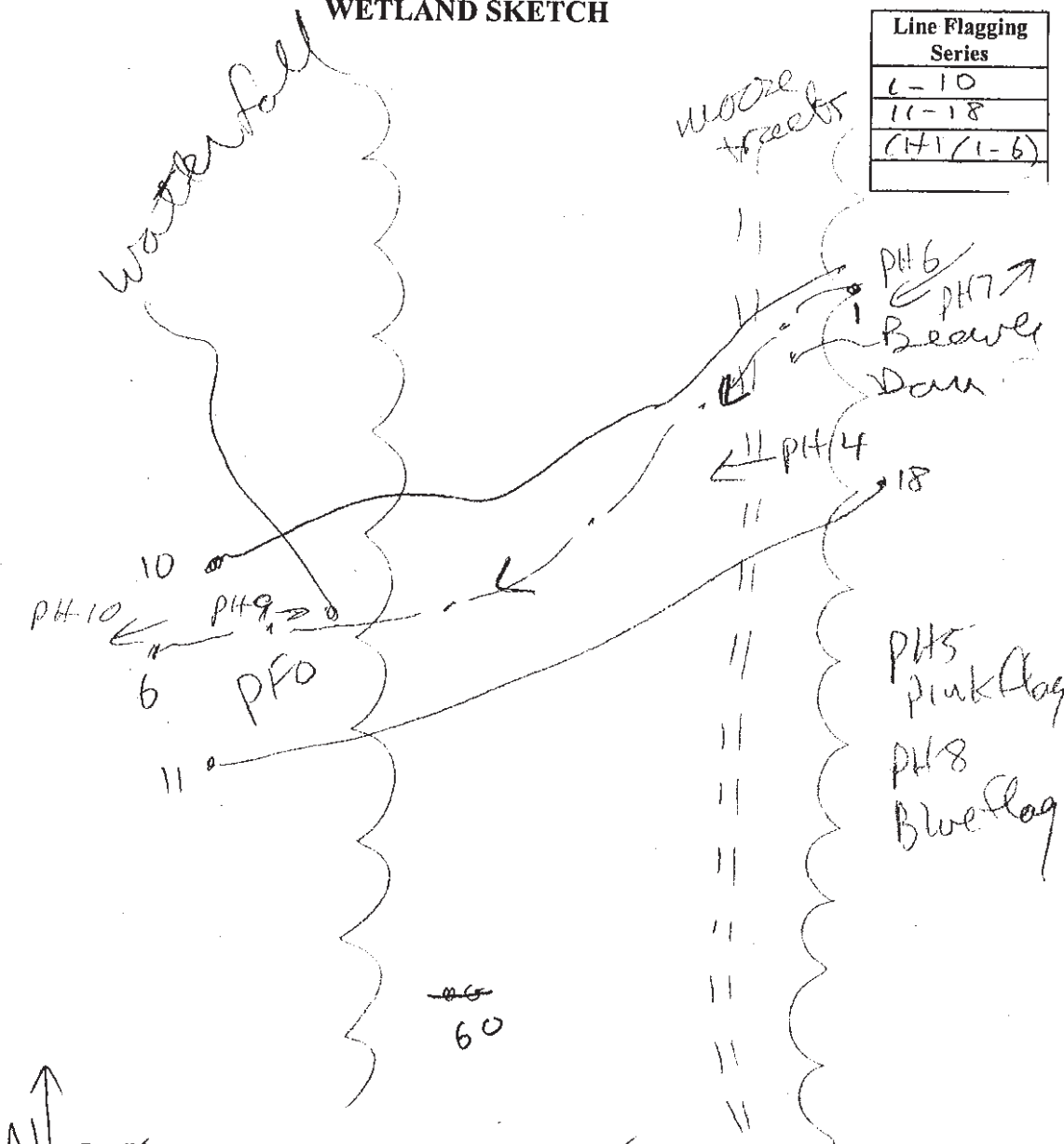
Photo #

4/5 6/7/8 9/10

SKETCH ON BACK

WETLAND SKETCH

Line Flagging Series
6-10
11-18
(H1)(1-6)



Possible Functions and Values:

- ☒ Groundwater Recharge/Discharge
- ☒ Fish and Shellfish Habitat
- ☒ Nutrient Removal
- ☐ Sediment/Shoreline Stabilization
- ☐ Recreation
- ☐ Uniqueness/Heritage
- ☐ Endangered Species Habitat

- ☒ Floodflow Alteration
- ☐ Sediment/Toxicant Retention
- ☒ Production Export
- ☒ Wildlife Habitat
- ☐ Educational/Scientific Value
- ☐ Visual Quality/Aesthetics
- ☐ Other

Checklist:

- ☒ Wetland ID# B17-64-60-1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features -- roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☐ Location of important wildlife sign.

D1: 04-00 1-000

PROJECT TITLE: <u>MPP</u>		TRANSECT: _____ PLOT: _____	
DELINEATOR(S): <u>MPP, AG, MC</u>		DATE: <u>10-19-07</u>	

VEGETATION	Stratum and Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
<u>Shrub</u>					
<u>Flaver</u>	60	60/115	50	✓	<u>PACW</u>
<u>Spi alls</u>	40	40/115	32	✓	<u>PAC+</u>
<u>Aln rug</u>	5	5/115	4		
<u>Vig dent</u>	10	10/115	8		
<u>Herb</u>					
<u>OS m cin</u>	10	10/26	40	✓	<u>PACW</u>
<u>onto dens</u>	3	3/26	12		
<u>Thel psal</u>	3	3/26	12		
<u>OS m rug</u>	10	10/26	40	✓	<u>PACW</u>

HYDROPHYTES <div style="display: flex; justify-content: space-around; border-bottom: 1px solid black; margin-bottom: 5px;"> OBL FACW FAC OTHER </div> Hydrophytes Subtotal (A): <u>5</u>	NON-HYDROPHYTES <div style="display: flex; justify-content: space-around; border-bottom: 1px solid black; margin-bottom: 5px;"> FAC FACU UPL </div> Non-hydrophytes Subtotal (B): <u>0</u>
PERCENT HYDROPHYTES (100A/(A+B)): <u>5/5 = 100%</u>	

HYDROLOGY

☐ RECORDED DATA
Stream, lake, or tidal gage
Aerial photography
Other

Identification: _____
Identification: _____
Identification: _____

☒ NO RECORDED DATA

☐ OBSERVATIONS:

@ surface

Depth to Free Water: _____
Depth to Saturation (including capillary fringe): _____
Altered Hydrology (explain): _____

☐ Inundated

☐ OTHER (explain): _____

☒ Saturated in upper 12"
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☒ Drainage Patterns within Wetland

CEN/E-CO-R-PT Version 7/19/03 Page 1

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.)
0-6	A ₁	10YR 6/6	—	yellow-brown coarse sand layered with
6-12+	O _a	10YR 2/1	—	10YR 4/2 10YR 4/6 above Sapric

HYDRIC SOIL INDICATOR(S):
Alluvial layer above O_a

REFERENCE(S):

OPTIONAL SOIL DATA

REFERENCE(S):

Taxonomic subgroup:
Soil drainage class:
Depth to active water table:
NTCHS hydric soil criterion:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation criterion met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Hydric soils criterion met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Wetland hydrology criterion met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
IS THIS DATAPOINT IN A WETLAND?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

CENAE-COR-PT Version 7/1/00 Page 2

PROJECT TITLE: MPRP

TRANSECT:

PLOT:

B17-64-60-1-WGT

01104-00-1-01x

PROJECT TITLE: MPRP TRANSECT: _____ PLOT: _____

DELINEATOR(S): MP, AG, MC DATE: 10-19-07

VEGETATION	Stratum and Species	Dominance Ratio	Percent Dominance	D O M	NWI Status
<u>Shrub</u>					
<u>Juv cane</u>		65	65/75	87	✓ RAC-U
<u>Sp. d. l. b. c.</u>		10	10/75	13	
<u>Herb</u>					
<u>P. r. a. g. u.</u>		20	20/55	37	✓ RAC-U
<u>Kal ang</u>		5	5/55	10	
<u>Cor can</u>		15	15/55	29	✓ RAC-
<u>Dog Bane</u>		5	5/55	10	
<u>Mit rep</u>		10	10/55	19	✓ RAC-U

HYDROPHYTES				NON-HYDROPHYTES		
OBL	FACW	FAC	*OTHER	FAC	FACU	UPL
Hydrophytes Subtotal (A): <u>0</u>				Non-hydrophytes Subtotal (B): <u>4</u>		
PERCENT HYDROPHYTES (100A/A+B): <u>0/4 = 0%</u>						

HYDROLOGY Hillside above

☐ RECORDED DATA
 Stream, lake, or tidal page Identification: _____
 Aerial photography Identification: _____
 Other Identification: _____

☒ NO RECORDED DATA

☐ OBSERVATIONS:
 Depth to Free Water: _____
 Depth to Saturation (including capillary fringe): _____
 Altered Hydrology (explain): _____

☐ Inundated ☐ Saturated in upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns within Wetland

☐ OTHER (explain): N/A

CENVE-CO-R-PT Version 7/9/00 Page 1

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.)
0-6	1A ₁ 4/2	10YR 4/2	—	SaLo
6-15+	1B ₂ 4/0	10YR 6/6	—	SaLo

HYDRIC SOIL INDICATOR(S):

REFERENCE(S):

W/A

OPTIONAL SOIL DATA

REFERENCE(S):

Taxonomic subgroup:

Soil drainage class:

Depth to active water table:

NTCHS hydric soil criterion:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation criterion met?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Hydric soils criterion met?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Wetland hydrology criterion met?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
IS THIS DATAPOINT IN A WETLAND?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

CENAE-COR-PI Version 3/1/00 Page 2

PROJECT TITLE:

MPRP

TRANSECT:

PLOT:

B17-64-60-1-WPT

WETLAND SUMMARY FORM

Observers: Galasso / Patton / Boothby Date: 10-25-07 68-95
 Town: Durham Series: 1-15, 16, 33, 34, 37, 38-67
 Segment #: 1-1 CMP Section #: 62 CMP Pole #: 60 Wetland #: 017-62-60-1
 Stream/Waterbody ID: STA 017-62-60-1-1 Corps plot: / Yes No

Dominant NWI Class: PSS 70%Other NWI Classes: PER 20%

Representative Wetland Vegetation (by Strata):

Herbs Shrubs Trees
Sci xyp Car eri Ile ver
Tun eff Car tur Spi tom
Shagnum spp var has Spi lat
Typ lat Aln inc
Ono sen

Representative Wetland Hydrology

Permanently Flooded Seasonally Flooded Saturated
 (approximate depth -) (approximate depth -)

Hydrologic Indicators: Silt Deposition Water Marks Drift Lines Water-Stained Leaves
Drainage Patterns Buttressed Trees Surface Scouring Elevated Roots

Other Observations:

Floodplain wetland near pole 60

Representative Wetland Soils:

Mineral
Organic

Depth	Horizon	Color	Redox Features	Texture
1-0	Si	-	-	Mucky
0-4	A	10YR 4/1	7.5YR 3/4	Sic
4-20"	B	6Z 3/10Y		Sic

Other Observations:

Meets NEIWPCC (2004) Criteria VI

Stream # 1 Data:

Width (Bank-Bank): 2 Depth @ Center: 6 Peren. ✓ Intermittent _____
 Bank Configuration: Undercut ✓ Vertical Gradual
 Channel Substrate: Peat-Muck ✓ Silt-Mud Sand Gravel/Cobble Boulder
Bedrock

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren. _____ Intermittent _____
 Bank Configuration: Undercut Vertical Gradual
 Channel Substrate: Peat-Muck Silt-Mud Sand Gravel/Cobble Boulder
Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/lodges, browse, dens, egg masses, potential VP):

Deer trailsBeaver activity / Beaver Dam on eastern edge of ROW

Notes:

ATV trail on m+n ROW crosses channel
Beaver Dam at edge of ROW

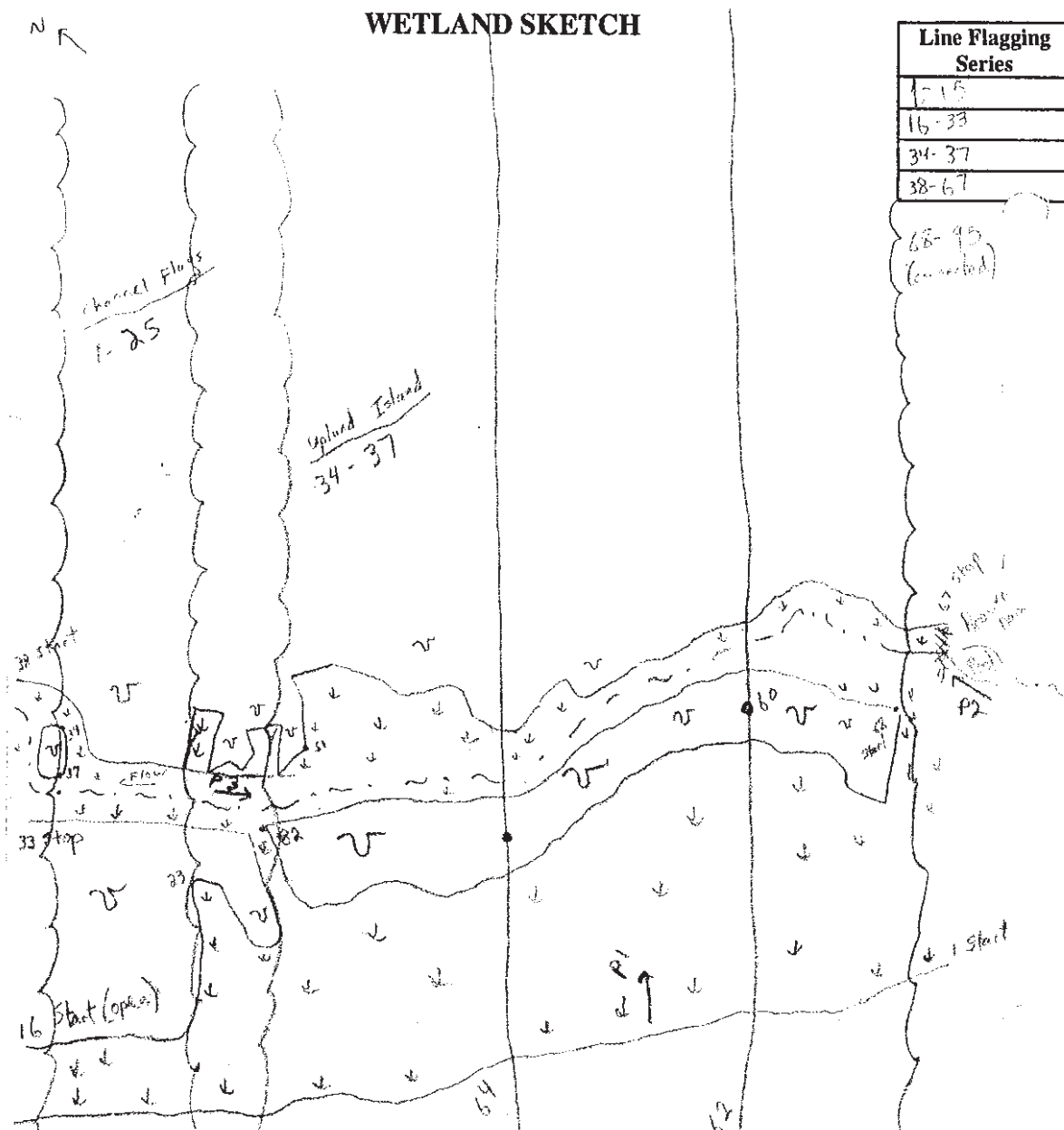
P 3 of waterbody upstream SE
P 4 of WL Flag

☐ Cedar SwampWetland of Special Significance

Photo #

P 2 of Beaver Dam / stream NW

SKETCH ON BACK



Line Flagging Series
1-15
16-33
34-37
38-67

15 stop
(open)

Possible Functions and Values:

- ☐ Groundwater Recharge/Discharge
- ☐ Fish and Shellfish Habitat
- ☐ Nutrient Removal
- ☐ Sediment/Shoreline Stabilization
- ☒ Recreation
- ☐ Uniqueness/Heritage
- ☐ Endangered Species Habitat

- ☒ Floodflow Alteration
- ☒ Sediment/Toxicant Retention
- ☒ Production Export
- ☒ Wildlife Habitat
- ☐ Educational/Scientific Value
- ☐ Visual Quality/Aesthetics
- ☐ Other

Checklist:

- ☒ Wetland ID# D17-62-60-1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☒ Location of important wildlife sign.

PROJECT TITLE: MPRP Project TRANSECT: D17-62-60-1 PLOT: wet plot
 DELINEATOR(S): Galasso/Battaglia/Boothby DATE: 10-25-07

VEGETATION	Stratum and Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
<u>Seedlings/Herbs</u>					
	Phacelia	60/110	55	X	FACW+
	Car. luv	20/110	18		
	Pol. sag	15/110	14		
	Car. eri	10/110	9		
	Spi. lat	5/110	5		
<u>Shrubs</u>					
	Salix spp	40/70	57	X	FAC or wetter
	Abi. bal	30/70	43	X	FAC
<u>Saps</u>					
	Abi. bal	40/70	57	X	FAC
	Ace. rub	30/70	43	X	FAC
<u>Trees</u>					
	Abi. bal	24"/44	55	X	FAC
	Ace. rub	20"/44	45	X	FAC

HYDROPHYTES				NON-HYDROPHYTES		
<u> </u>	<u>1</u>	<u>6</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OBL	FACW	FAC	*OTHER	FAC	FACU	UPL
Hydrophytes Subtotal (A): <u>7</u>				Non-hydrophytes Subtotal (B): <u>0</u>		
PERCENT HYDROPHYTES (100A/A+B): <u>100%</u>						

HYDROLOGY

☐ RECORDED DATA
 Stream, lake, or tidal gage Identification: _____
 Aerial photography Identification: _____
 Other Identification: _____

☐ NO RECORDED DATA

☐ OBSERVATIONS:
 Depth to Free Water: water in pit at 11" 11"
 Depth to Saturation (including capillary fringe): At surface At surface
 Altered Hydrology (explain): N/A N/A

☒ Inundated ☒ Saturated in upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☒ Drainage Patterns

☐ OTHER (explain): wetland associated w/ waterbody and located w/ in floodplane wetland associated w/ waterbody and located w/ in floodplane

channel

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.)
1-0	O _i	--	--	Mucky
0-4	A	10YR 4/1	7.5YR 3/4 m 4D	SiC
4-20"	B	G 13/10Y	10YR 4/4 c 3P	SiC

HYDRIC SOIL INDICATOR(S): VI REFERENCE(S): NEI WPCC 2004

OPTIONAL SOIL DATA

Taxonomic subgroup: /
 Soil drainage class: /
 Depth to active water table: /
 NTCHS hydric soil criterion: /

REFERENCE(S):

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation criterion met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Hydric soils criterion met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Wetland hydrology criterion met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
IS THIS DATAPOINT IN A WETLAND?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

GENE COR-PT Version 7/100 Page 2

PROJECT TITLE: MPRP Project TRANSECT: D17-62-60-1 PLOT: wet Plot

PROJECT TITLE: MRRP Project
 DELINEATOR(S): Galasso/Battaglia/Boothby
 TRANSECT: D17-62-60-1
 DATE: 10-25-07
 PLOT: Wp Plot

VEGETATION	Stratum and Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
	<u>Herbs/Seedlings</u>				
	sol rug	40/90	44	X	FAC
	Que rub	30/90	33	X	FACU
	Chimacum	10/90	11		
	Tsu can	10/90	11		
	<u>Shrubs</u>				
	Tsu can	40/120	33	X	FACU
	Que rub	30/120	25	X	FACU
	Ace rub	30/120	25	X	FAC
	Frag gra	20/120	17		
	<u>Saplings</u>				
	Tsu can	60/100	60	X	FACU
	Pin stro	20/100	20	X	FACU
	Abi bal	20/100	20	X	FAC
	<u>Trees</u>				
	Tsu can	42/70	60	X	FACU
	Abi bal	28/70	40	X	FAC

HYDROPHYTES	NON-HYDROPHYTES
<u>4</u>	<u>6</u>
OBL FACW FAC *OTHER	FAC- FACU UPL
Hydrophytes Subtotal (A): <u>4</u>	Non-hydrophytes Subtotal (B): <u>6</u>
PERCENT HYDROPHYTES (100A/A+B): <u>40%</u>	

HYDROLOGY

☐ RECORDED DATA
 Stream, lake, or tidal gage Identification: _____
 Aerial photography Identification: _____
 Other Identification: _____

☐ NO RECORDED DATA

☐ OBSERVATIONS:
 Depth to Free Water: _____
 Depth to Saturation (including capillary fringe): _____
 Altered Hydrology (explain): _____

☐ Inundated ☐ Saturated in upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns within Wetland

☐ OTHER (explain): _____

channel

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.)
1-0	O _i	--	--	Duff
0-2	A	10YR 3/4	--	SiL
2-18"	B	10YR 4/6	--	SiL

HYDRIC SOIL INDICATOR(S): REFERENCE(S):

OPTIONAL SOIL DATA REFERENCE(S):

Taxonomic subgroup:
Soil drainage class:
Depth to active water table:
NTCHS hydric soil criterion:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation criterion met?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Hydric soils criterion met?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Wetland hydrology criterion met?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
IS THIS DATAPOINT IN A WETLAND?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

CENAE-COR-PT Version 7/1/03 Page 2

PROJECT TITLE: MRRP Project

TRANSECT: 017-62-60-1

PLOT: Up Plot

USACE
Data Plot Examples
Segment 5

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: QMR City/County: _____ Sampling Date: 4/26/17
 Applicant/Owner: CMP State: ME Sampling Point: Plot 185-02 - WP
 Investigator(s): SNH DHP Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): gentle slope Local relief (concave, convex, none): none
 Slope (%): 4% Lat: 42°06'2.61" N Long: 307°12'4.36" E Datum: NAD83
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No X
 Hydric Soil Present? Yes _____ No X
 Wetland Hydrology Present? Yes _____ No X

Is the Sampled Area within a Wetland? Yes _____ No X
 If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

Data gathered during heavy rain event

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

____ Surface Water (A1)
 ____ High Water Table (A2)
 ____ Saturation (A3)
 ____ Water Marks (B1)
 ____ Sediment Deposits (B2)
 ____ Drift Deposits (B3)
 ____ Algal Mat or Crust (B4)
 ____ Iron Deposits (B5)
 ____ Inundation Visible on Aerial Imagery (B7)
 ____ Sparsely Vegetated Concave Surface (B8)

____ Water-Stained Leaves (B9)
 ____ Aquatic Fauna (B13)
 ____ Marl Deposits (B15)
 ____ Hydrogen Sulfide Odor (C1)
 ____ Oxidized Rhizospheres on Living Roots (C3)
 ____ Presence of Reduced Iron (C4)
 ____ Recent Iron Reduction in Tilled Soils (C6)
 ____ Thin Muck Surface (C7)
 ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

____ Surface Soil Cracks (B6)
 ____ Drainage Patterns (B10)
 ____ Moss Trim Lines (B16)
 ____ Dry-Season Water Table (C2)
 ____ Crayfish Burrows (C8)
 ____ Saturation Visible on Aerial Imagery (C9)
 ____ Stunted or Stressed Plants (D1)
 ____ Geomorphic Position (D2)
 ____ Shallow Aquitard (D3)
 ____ Microtopographic Relief (D4)
 ____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____
 Water Table Present? Yes _____ No _____ Depth (inches): _____
 Saturation Present? Yes ✓ No _____ Depth (inches): surface
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

During normal conditions saturation would not be present

VEGETATION – Use scientific names of plants.

Sampling Point: Plot-185-02-UP

Tree Stratum (Plot size: <u>30'x</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Pinus strobus</u>	<u>70</u>	<input checked="" type="checkbox"/>	<u>Full</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
				_____ = Total Cover
Sapling/Shrub Stratum (Plot size: <u>15'x</u>)				
1. <u>Abies balsamea</u>	<u>45</u>	<input checked="" type="checkbox"/>	<u>Fac</u>	
2. <u>Quercus grandifolia</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>Full</u>	
3. <u>Corylus cornuta</u>	<u>7</u>	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
				_____ = Total Cover
Herb Stratum (Plot size: <u>5'x</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
				_____ = Total Cover
Woody Vine Stratum (Plot size: <u>30'x</u>)				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
				_____ = Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Rapid Test for Hydrophytic Vegetation

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0¹

___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No ☒

Remarks: (Include photo numbers here or on a separate sheet.)

Sampling Point: Plot-185-02-4P

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Indicators for Problematic Hydric Soils³:

- | | | |
|---|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) | <input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) | <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Dark Surface (S7) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | <input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B) |
| <input type="checkbox"/> Sandy Redox (S5) | | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Stripped Matrix (S6) | | <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | | <input type="checkbox"/> Other (Explain in Remarks) |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Hydric Soil Present? Yes No ☒

Type: _____

Depth (inches):

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: QMI City/County: _____ Sampling Date: 4/26/17
 Applicant/Owner: CMP State: ME Sampling Point: P164-184-05-WET
 Investigator(s): SNH DHP Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): slight slope Local relief (concave, convex, none): none
 Slope (%): 2 Lat: 428889.53 N Long: 3075982.71 E Datum: NAD 83
 Soil Map Unit Name: _____ NWI classification: PFO1/4E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) <u>Data for this plot taken during heavy rain event</u>	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) <input checked="" type="checkbox"/> Surface Water (A1) _____ Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) _____ Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) _____ Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) _____ Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) _____ Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input checked="" type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>1</u> Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: <u>Root buttressing observed on all trees in plot</u>		

VEGETATION – Use scientific names of plants.

Sampling Point: Plot-184-05-WET

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Acer rubrum</u>	<u>50</u>	<u>✓</u>	<u>Fac</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A/B)																
2. <u>Pinus strobus</u>	<u>10</u>																			
3. <u>Abies balsamea</u>	<u>15</u>	<u>✓</u>	<u>Fac</u>																	
4. <u>Fraxinus pennsylvanica</u>	<u>5</u>																			
5. _____				Prevalence Index worksheet: <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____</td> <td>(A) _____ (B) _____</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species _____	x 2 = _____	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: _____	(A) _____ (B) _____	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species _____	x 1 = _____																			
FACW species _____	x 2 = _____																			
FAC species _____	x 3 = _____																			
FACU species _____	x 4 = _____																			
UPL species _____	x 5 = _____																			
Column Totals: _____	(A) _____ (B) _____																			
Prevalence Index = B/A = _____																				
6. _____																				
7. _____																				
<u>65</u> = Total Cover																				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)																				
1. _____																				
2. _____																				
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
_____ = Total Cover																				
Herb Stratum (Plot size: <u>5'R</u>)																				
1. <u>Dryopteris carthusiana</u>	<u>30</u>	<u>✓</u>	<u>Fac</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Potamogeton amplifolius</u>	<u>5</u>																			
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
<u>35</u> = Total Cover																				
Woody Vine Stratum (Plot size: <u>30'</u>)																				
1. _____				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.																
2. _____																				
3. _____																				
4. _____																				
_____ = Total Cover																				
Hydrophytic Vegetation Present? Yes _____ No _____																				
Remarks: (Include photo numbers here or on a separate sheet.) 																				

SOIL

Sampling Point: Plot-184-05-WET

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, |
| <input type="checkbox"/> Histic Epipedon (A2) | MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Stratified Layers (A5) | <input checked="" type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
☐ Dark Surface (S7) (**LRR K, L**)
☐ Polyvalue Below Surface (S8) (**LRR K, L**)
☐ Thin Dark Surface (S9) (**LRR K, L**)
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: QME City/County: _____ Sampling Date: 4/26/17
 Applicant/Owner: CMP State: ME Sampling Point: Plot-185-02-UP
 Investigator(s): SNH DHP Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Hill slope/shoulder Local relief (concave, convex, none): none
 Slope (%): 4% Lat: 42°41'32.54"N Long: 70°22'45.57"E Datum: NAD 83
 Soil Map Unit Name: _____ NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation ☒ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>	
Remarks: (Explain alternative procedures here or in a separate report.) <u>Data for form recorded during rain event.</u> <u>Plot within cleared ROW.</u>	

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes _____ No _____ Depth (inches): _____		
Water Table Present? Yes _____ No _____ Depth (inches): _____		
Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): _____		
(includes capillary fringe)		Wetland Hydrology Present? Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: <u>Saturation present due to rain during survey. Saturation would not be present in normal circumstances</u>		

Sampling Point: Plot 185-02-41D

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'R</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	—			
2.				
3.				
4.				
5.				
6.				
7.				
		= Total Cover		
Sapling/Shrub Stratum (Plot size: <u>15'R</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Pteridium ac.</u>	<u>30</u>	<u>✓</u>	<u>facu</u>
2.	<u>Ilex var.</u>	<u>7</u>		
3.	<u>Pinus strobus</u>	<u>2</u>		
4.				
5.				
6.				
7.				
		<u>39</u> = Total Cover		
Herb Stratum (Plot size: <u>5'R</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	<u>Solidago rugosa</u>	<u>45</u>	<u>✓</u>	<u>fac</u>
2.	<u>Aster sp.</u>	<u>40</u>	<u>✓</u>	
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
		= Total Cover		
Woody Vine Stratum (Plot size: <u>30'R</u>)		Absolute % Cover	Dominant Species?	Indicator Status
1.	—			
2.				
3.				
4.				
		= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____	(A) _____ (B) _____
Prevalence Index = B/A = _____	

Hydrophytic Vegetation Indicators:

☐ Rapid Test for Hydrophytic Vegetation

☐ Dominance Test is >50%

☐ Prevalence Index is ≤3.0¹

☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: Plot-185-02-4P

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (LRR K, L, **MLRA 149B**)
☐ Coast Prairie Redox (A16) (LRR K, L, R)
☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
☐ Dark Surface (S7) (LRR K, L)
☐ Polyvalue Below Surface (S8) (LRR K, L)
☐ Thin Dark Surface (S9) (LRR K, L)
☐ Iron-Manganese Masses (F12) (LRR K, L, R)
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: QMI City/County: _____ Sampling Date: 4/26/17
 Applicant/Owner: CMP State: ME Sampling Point: Plot-185-02-WET
 Investigator(s): SNH DHP Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Valley Local relief (concave, convex, none): concave
 Slope (%): 27 Lat: 424189.03 N Long: 3072201.41 E Datum: NAD 83
 Soil Map Unit Name: _____ NWI classification: PEM1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No _____ (If no, explain in Remarks.)
 Are Vegetation ☒, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No ☒
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____	
Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

*Data for fauna collected in heavy rain.
 Plot situated in cleared and maintained ROW*

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Aquatic Fauna (B13)	
<input type="checkbox"/> Marl Deposits (B15)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations:	
Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>2</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
Water Table Present? Yes _____ No _____ Depth (inches): _____	
Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>surface</u> (includes capillary fringe)	

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Data collected during rain events

VEGETATION – Use scientific names of plants.

Sampling Point: Plot - 185 - 02 - WET

Tree Stratum (Plot size: <u>30'R</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Sapling/Shrub Stratum (Plot size: <u>15'R</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Alnus incana</u>	<u>7%</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
2. <u>Ilex verticillata</u>	<u>4%</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			

Hydrophytic Vegetation Indicators:

☒ Rapid Test for Hydrophytic Vegetation

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0¹

___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Herb Stratum (Plot size: <u>5'R</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Agrostis gigantea</u>	<u>50%</u>	<input checked="" type="checkbox"/>	<u>FACW</u>
2. <u>Typha latifolia</u>	<u>70%</u>	<input checked="" type="checkbox"/>	<u>OBL</u>
3. <u>Carex sp.</u>	<u>20%</u>		
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
12. _____			

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			

Hydrophytic Vegetation Present?

Yes ☒ No _____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 1704-185-02-WET

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- | | |
|---|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) | <input checked="" type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |
| <input type="checkbox"/> Sandy Redox (S5) | |
| <input type="checkbox"/> Stripped Matrix (S6) | |
| <input type="checkbox"/> Dark Surface (S7) (LRR R, MLRA 149B) | |

Indicators for Problematic Hydric Soils³:

- ☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ☐ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ☐ Dark Surface (S7) (**LRR K, L**)
- ☐ Polyvalue Below Surface (S8) (**LRR K, L**)
- ☐ Thin Dark Surface (S9) (**LRR K, L**)
- ☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

USACE
Data Plot Examples
Merrill Road Converter Station

Maine Power Reliability Project

Team B

WETLAND SUMMARY FORM

Observers: KF, MC Date: 9/25/07
 Town: Lowiston Series: _____
 Segment #: 14 CMP Section #: 200 CMP Pole #: 299 Wetland #: 1
 Stream/Waterbody ID: _____ Corps plot: ☒ Yes ☐ No

Dominant NWI Class: PEM1 Other NWI Classes: PSS1

Representative Wetland Vegetation (by Strata)

Calcan Sci cyp
Thy lat owd sen
AST umb
Sol qig

Aln rug
Vib dent
Spic lat

Representative Wetland Hydrology

☐ Permanently Flooded (approximate depth -) ☒ Seasonally Flooded (approximate depth - 4") ☐ Saturated

Hydrologic Indicators: ☐ Silt Deposition ☐ Water-Stained Leaves
☒ Water Marks ☐ Drift Lines ☒ Surface Scouring
☒ Drainage Patterns ☐ Buttressed Trees ☐ Elevated Roots

Other Observations:

Representative Wetland Soils:

☒ Mineral
☐ Organic

Depth	Horizon	Color	Redox Features	Texture
<u>2-4</u>	<u>0</u>	<u>10YR2/2</u>		<u>F. silty</u>
<u>4-6</u>	<u>1</u>	<u>5YR4/1</u>		<u>S. lo</u>
<u>6-10</u>	<u>2</u>	<u>5YR5/1</u>	<u>10YR4/6</u>	
			<u>5YR5/1</u>	

Other Observations:
 Meets NEIWPCC (2004) Criteria VI

Stream # 1 Data:

Width (Bank-Bank): _____ Depth @ Center: _____ Peren: _____ Intermittent: _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
 _____ Bedrock

Stream # 2 Data

Width (Bank-Bank): _____ Depth @ Center: _____ Peren: _____ Intermittent: _____
 Bank Configuration: _____ Undercut _____ Vertical _____ Gradual _____
 Channel Substrate: _____ Peat-Muck _____ Silt-Mud _____ Sand _____ Gravel/Cobble _____ Boulder _____
 _____ Bedrock

Wildlife Observations/Sign (e.g., tracks/trails, droppings, dams/ledges, browse, dens, egg masses, potential VP):

Notes:

☐ Cedar Swamp

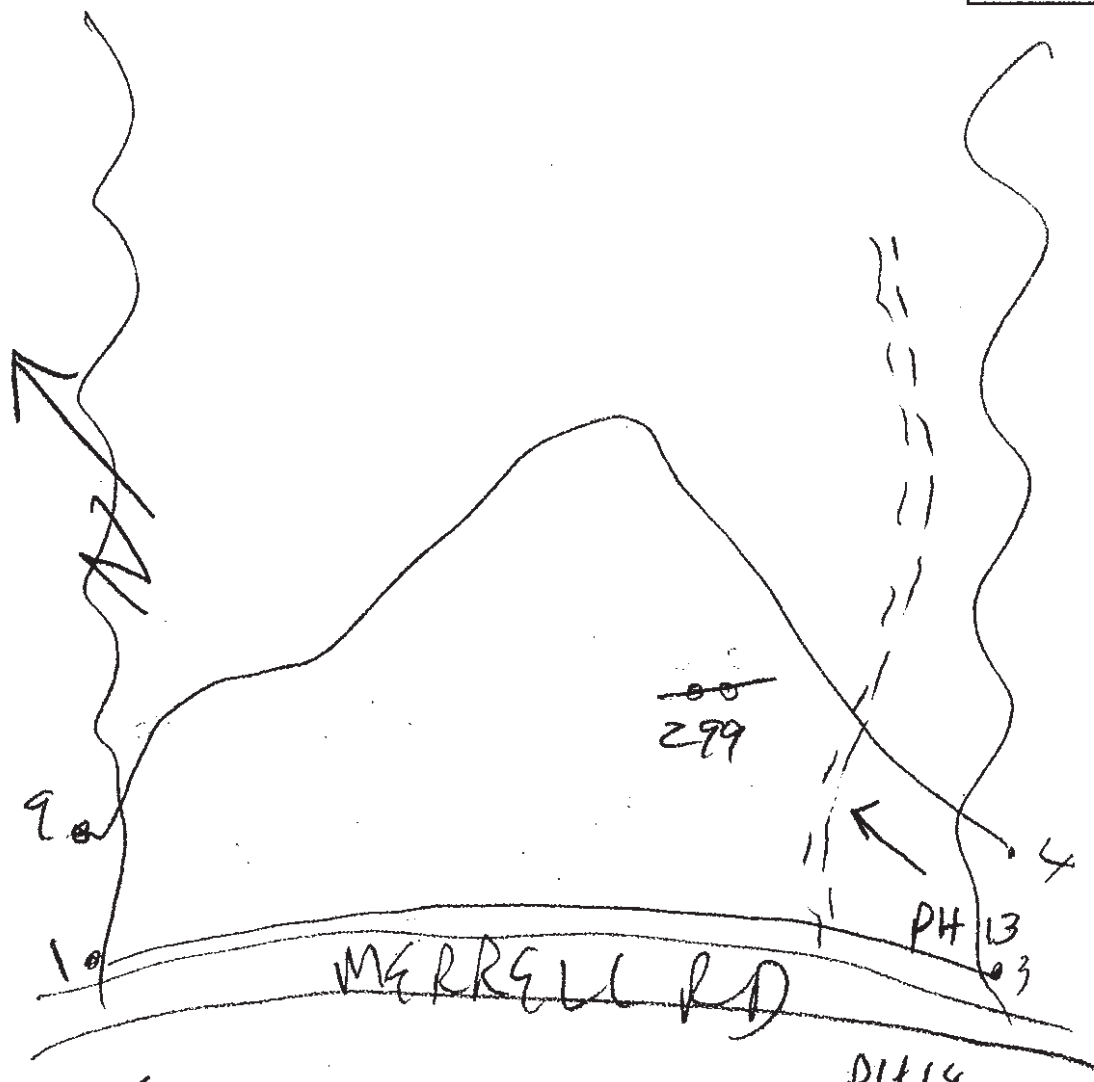
☐ Wetland of Special Significance

Photo # 13/14

SKETCH ON BACK

WETLAND SKETCH

Line Flagging Series
1-3
4-9



Possible Functions and Values:

- ☒ Groundwater Recharge/Discharge
- ☐ Fish and Shellfish Habitat
- ☐ Nutrient Removal
- ☐ Sediment/Shoreline Stabilization
- ☐ Recreation
- ☐ Uniqueness/Heritage
- ☐ Endangered Species Habitat

- ☐ Floodflow Alteration
- ☐ Sediment/Toxicant Retention
- ☐ Production Export
- ☐ Wildlife Habitat
- ☐ Educational/Scientific Value
- ☐ Visual Quality/Aesthetics
- ☐ Other

Checklist:

- ☒ Wetland ID# B14-200-299-1
- ☒ North arrow.
- ☒ Detailed sketch of wetland boundary and flagging sequence.
- ☒ Natural and man-made features - roads, culverts, outcrops, structures, etc.
- ☒ Photo locations.
- ☐ Location of important wildlife sign.

B14-200-299-1-WGT

PROJECT TITLE: MPPRP TRANSECT: _____ PLOT: _____
 DELINEATOR(S): KF MC DATE: 9/25/07

VEGETATION	Stratum and Species	Dominance Ratio	Percent Dominance	DOM	NWI Status
<u>PSS</u>					
<u>Aln rug</u>	<u>35</u>	<u>35/35</u>	<u>100</u>		<u>FACW</u>
<u>Pem</u>					
<u>Cal can</u>	<u>30</u>	<u>30/100</u>	<u>30</u>		<u>FACW</u>
<u>Ando sens</u>	<u>5</u>	<u>5/100</u>			
<u>Sci Cyp</u>	<u>15</u>	<u>15/100</u>			
<u>Thy lat</u>	<u>50</u>	<u>50/100</u>	<u>50</u>		<u>FACW</u>

HYDROPHYTES 3 NON-HYDROPHYTES _____
 OBL FACW FAC OTHER FAC FACU UPL
 Hydrophytes Subtotal (A): 3 Non-hydrophytes Subtotal (B): 0
 PERCENT HYDROPHYTES (100A/A+B): 3/3 = 100%

HYDROLOGY

☐ RECORDED DATA
 Stream, lake, or tidal gage Identification: _____
 Aerial photography Identification: _____
 Other Identification: _____

☒ NO RECORDED DATA

☒ OBSERVATIONS:
 Depth to Free Water: _____
 Depth to Saturation (including capillary fringe): +10"
 Altered Hydrology (explain): _____

☐ Inundated ☒ Saturated in upper 12" ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☒ Drainage Patterns within Wetland

☐ OTHER (explain): _____

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.)
2-5"	O ₁	10YR 2/2	-	FiGric
0-6	B ₁	5Y 4/1	-	SiLo
6-10 +	B ₂	5Y 4/1	-	SiLo
	B ₃	5Y 4/1	10YR 4/6 5Y 4/1	

HYDRIC SOIL INDICATOR(S):

VI

REFERENCE(S):

NE Hydric soils

OPTIONAL SOIL DATA

REFERENCE(S):

Taxonomic subgroup:
Soil drainage class:
Depth to active water table:
NTCHS hydric soil criterion:

CONCLUSIONS

	YES	NO	REMARKS:
Hydrophytic vegetation criterion met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Hydric soils criterion met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Wetland hydrology criterion met?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
IS THIS DATAPOINT IN A WETLAND?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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PROJECT TITLE:

MRRP

TRANSECT:

PLOT:

B14-200-299-1-WBT

B14-200-299-1-upl

PROJECT TITLE: MPPR

TRANSECT:

PLOT:

DELINEATOR(S): KF, MC

DATE: 9-25-07

VEGETATION

Stratum and Species

Dominance Ratio

Percent Dominance

DOM

NWI Status

com per
cal can
fun com
spi lat

20

20/75

27

upl

10

10/75

13

40

40/75

53

FAC U

5

5/75

7

HYDROPHYTES

NON-HYDROPHYTES

OBL FACW FAC OTHER

FAC FACU UPL

Hydrophytes Subtotal (A):

Non-hydrophytes Subtotal (B):

PERCENT HYDROPHYTES (100A/A+B):

HYDROLOGY

☐ RECORDED DATA

Stream, lake, or tidal gage

Identification:

Aerial photography

Identification:

Other

Identification:

☒ NO RECORDED DATA

☐ OBSERVATIONS:

Depth to Free Water:

Depth to Saturation (including capillary fringe):

Altered Hydrology (explain):

☐ Inundated

☐ Saturated in upper 12"

☐ Water Marks

☐ Drift Lines

☐ Sediment Deposits

☐ Drainage Patterns within Wetland

☐ OTHER (explain):

2011 2011

SOIL Sketch landscape position of this plot. Indicate relative position of other plot(s) and the wetland flag if not on plan.

v ↘

Submission of photo of plot is encouraged.

DEPTH	HORIZON	MATRIX COLOR	REDOXIMORPHIC FEATURES (color, abundance, size, contrast)	COMMENTS (USDA texture, nodules, concretions, masses, pore linings, restrictive layers, root distribution, soil water, etc.)
0-6	A ₁	10YR		Solo
6-8	B ₁	3/2		
		10 5YR		Solo
		4/6		
Refusal				

HYDRIC SOIL INDICATOR(S): w/A REFERENCE(S):

OPTIONAL SOIL DATA REFERENCE(S):

Taxonomic subgroup:
 Soil drainage class:
 Depth to active water table:
 NTCHS hydric soil criterion:

CONCLUSIONS

	YES	NO	REMARKS
Hydrophytic vegetation criterion met?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Hydric soils criterion met?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Wetland hydrology criterion met?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
IS THIS DATAPOINT IN A WETLAND?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

CENAE-COR-PT Version 7/100 Page 2

PROJECT TITLE: MPRP TRANSECT: PLOT:

B14-200-299-1-UPR

Exhibit E: Photographs

The following section provides, by segment, example photographs of the typical setting and wetland conditions associated with the NECEC corridors. The example photos provided generally correlate with the Wetlands of Special Significance (WOSS) described in Section 1.3 of the Wetlands Delineation Report. Photos of each wetland and other resources will be available upon request.

Segment 1



Photo 1: View of wetland 24-10: Primarily PSS with PEM wetland components located in Bradstreet Township (7/22/2015).



Photo 2: View of wetland 33-07: Primarily PEM, with an area of PFO wetland habitat located in Johnson Mountain Township (7/14/2015).



Photo 3: View of wetland 48-08: PSS wetland located in West Forks Plantation (6/4/2015).

Segment 2



Photo 1: View of wetland 54-01: Primarily PFO wetland with small PSS component located within existing transmission line corridor in The Forks Plantation (8/12/2015).



Photo 2: View of wetland 56-01: A PEM/PFO wetland located in The Forks Plantation (8/18/2015).



Photo 3: View of wetland 64-03: PFO wetland also contains greater than 20,000 square feet of PEM located in Bald Mountain Township (9/16/2015).



Photo 4: View of wetland 64-06: PSS wetland located in Bald Mountain Township (9/16/2015).



Photo 5: View of wetland 64-10: PFO/PEM wetland located in Bald Mountain Township and Caratunk (9/17/2015).



Photo 6: View of wetland 74-102: PEM/PSS wetland located in Moscow (5/20/2017).

Segment 3



Photo 1: View of wetland 78-05: PFO wetland with smaller PEM components located in Concord Township (5/24/2017).



Photo 2: View of wetland 100-05: PFO wetland located in Starks (5/16/2017).



Photo 3: View of wetland 103-11: Predominantly PSS/PFO wetland with smaller PEM components located in Industry (5/15/2017).



Photo 4: View of wetland 116-05: PFO/PEM/POW wetland located in Jay (5/2/2017).



Photo 5: Wetland 121-01: PEM wetland located in Jay (4/30/2017).



Photo 6: Wetland 122-03: PSS wetland located in Livermore Falls (4/30/2017).



Photos 7: Wetland 127-01: PFO wetland located in Livermore Falls (4/27/2017).



Photo 8: Wetland 129-01: PFO wetland with smaller PEM components located in Livermore Falls (4/25/2017).



Photo 9: Wetland 131-01: Predominately PSS wetland with smaller PEM components located in Leeds (4/29/2017).



Photo 10: Wetland 140-06: Predominately PSS wetland with smaller PFO components located in Greene (5/31/2017).



Photo 11: Wetland 142-04: Predominately PEM wetland in Greene (8/14/2017).

Segment 4



Photo 1: View of wetland 146-04: PSS wetland that runs along Stetson Brook in Lewiston (5/19/2017).



Photo 2: View of wetland 152-01: A PEM dominated wetland in Lewiston (5/21/2017).



Photo 3: View of wetland 155-03: PEM wetland located in Lewiston (5/23/2017).



Photo 4: View of wetland 159-08: PEM wetland located Lewiston (5/26/2017).

Segment 5



Photo 1: View of wetland 162-04: PEM wetland located in Windsor (4/28/2017).



Photo 2: View of wetland 167-01: PEM/POW wetland located in the Town of Whitefield (4/15/2017).



Photo 3: View of wetland 169-02: PSS wetland located in the Town of Whitefield (4/15/2017).



Photo 4: View of wetland 178-06: PSS wetland located in Alna (4/14/2017).



Photo 5: View of 188-17: PEM/PSS wetland located adjacent to Maine Yankee Substation in Wiscasset (10/23/2008).

Merrill Road Converter Station



Photo 1: View of wetland 145-01: Primarily PEM wetland with sub-components of PSS located adjacent to the Merrill Road Converter Station survey area (4/19/2017).



Photo 2: View of wetland 145-02: Seasonally flooded to saturated PFO wetland within the Merrill Road Converter Station survey area (4/30/2017).

Fickett Road Substation



Photo 1: View of wetland 161-16: Primarily PEM/PSS wetland within the Fickett Road Substation survey area (5/25/2017).

HDD Termination Stations



View facing east towards the Moxie Gore Termination Station.



View facing west towards the temporary drilling platform and trench locations for the Moxie Gore Termination Station.



View of WET 49-01 (PFO), approximately 65 feet west of the HDD drilling pad in Moxie Gore.



View facing east towards the West Fork Termination Station.



View facing southeast towards temporary receiving platform and trench locations for the West Forks Termination Station.



View of WET-48-03 (PFO/PEM), approximately 230 feet north-northwest of the West Forks Termination Station.



View of WET-48-01 (PFO/PEM), approximately 66 feet east of the West Forks Termination Station.